VOLUME XXXI NUMBER FIVE

THE NATIONAL GEOGRAPHIC MAGAZINE

MAY, 1917

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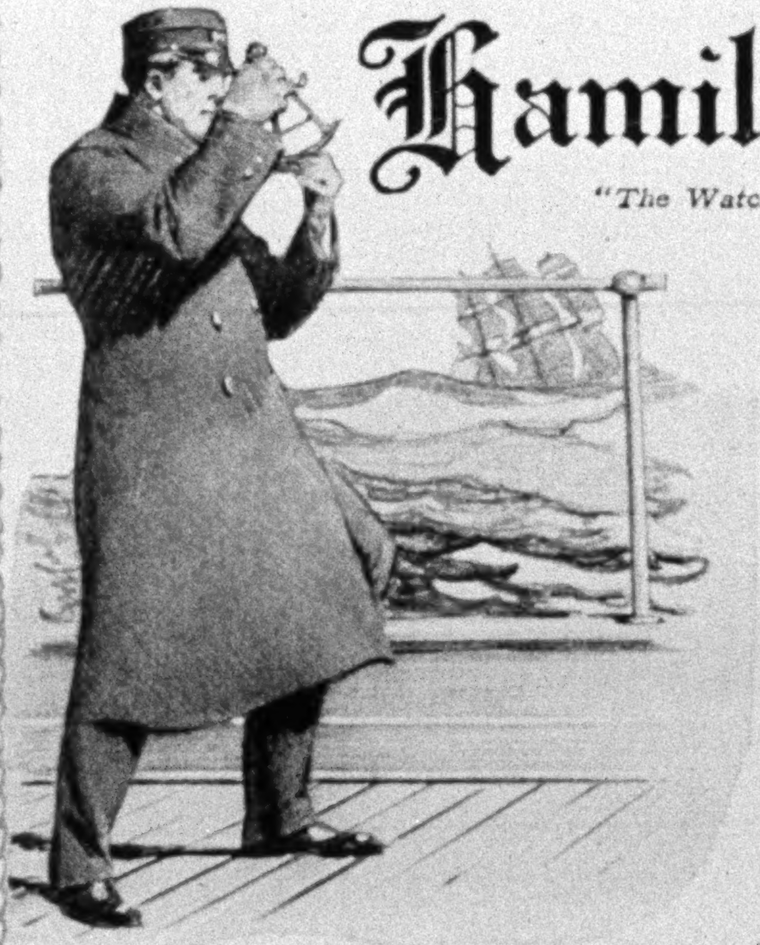
Hamilton Watch

"The Watch of Railroad Accuracy"



Used for Navigation—"Far more accurate than the average chronometer," says Captain in U. S. N.

The following letter, recently received from an officer of the Navy, speaks for itself. The signer's name is omitted for reasons of naval etiquette.

Hamilton Watch Company
Lancaster, Pa.

Gentlemen:—The watch purchased from you in December, 1913, is a marvel of accuracy. On January 1, 1914, it was set 22 seconds fast, on standard mean time, and throughout the year frequent comparisons were made which showed a steady and regular gain. On January 1, 1915, it was again compared and was found to be 1 minute 35 seconds fast, or a gain of 1 minute 13 seconds in 365 days, which is equivalent to a gaining rate of 0.2 second a day, or 6 seconds a month.

Had the rate of gain been variable, it would have been very different, but running as steadily and uniformly as it did, I would have no hesitancy whatever in using it for navigational purposes, as it is far more accurate than the average chronometer used for this purpose, and much more convenient.

(Signed)

IMAGINE yourself carrying this very watch—it was not an expensive watch. Wouldn't you derive an immense satisfaction from the comfort, convenience and companionship of so accurate a watch? Every Hamilton Watch sold has Hamilton Accuracy and Hamilton Durability.

Prices of Hamiltons: The lowest-priced Hamilton is a movement alone for $13.00 $14.00 in Canada). The highest-priced Hamilton is our Masterpiece at $150.00 in 18-k. heavy gold case. Other Hamiltons at $26.50, $30.00, $40.00, $55.00, etc. Hamiltons are made in many models—in cased watches; also in movements alone which your jeweler can fit to your present watch-case.

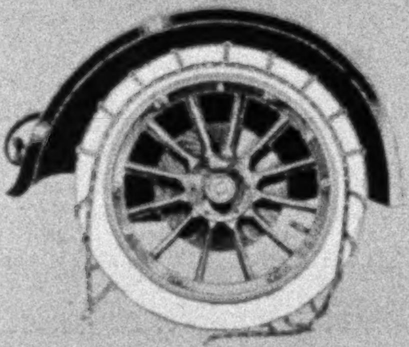
Write for Hamilton Watch Book "The Timekeeper"

describing all models and containing much interesting watch information.

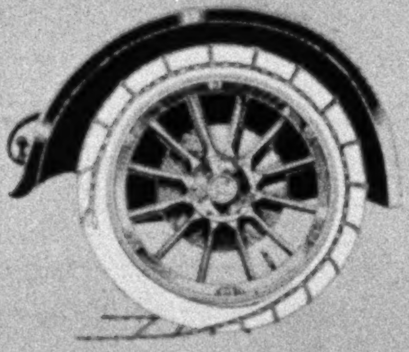
HAMILTON WATCH COMPANY
Dept. 35 Lancaster, Pennsylvania

WEED
TIRE CHAINS

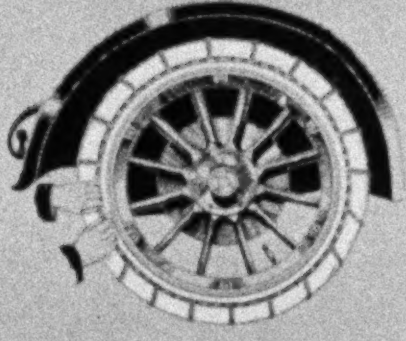
Attached without the Use of a Jack or Other Tools



Lay chains over wheel with hooks toward rear, and tuck the slack under front part of wheel.



Start car forward just enough to run over slack ends.



Hook chains as tightly as possible by hand.

Do Not Anchor

Chains must be free to "Creep"—to Shift their Position on the Tires Continually—or they will Injure Tires.

Weed Chains *do* "creep"—a patented principle

AMERICAN CHAIN COMPANY, Inc.

BRIDGEPORT A C C CONNECTICUT

In Canada: DOMINION CHAIN COMPANY, Ltd., Niagara Falls, Ontario

Largest Chain Manufacturers in the World

THE COMPLETE CHAIN LINE—ALL TYPES, ALL SIZES, ALL STYLES
From Plumbers' Safety Chain to Ships' Anchor Chain

Suppose All Could Use the HUDSON SUPER-SIX

Would Other Types Remain?

In the present conflict of types—Fours, Sixes, and V-types—it is well to consider what would happen if the Super-Six were free. Our patents confine it to the Hudson.

As it is now, numerous fine-car makers advocate other types, and tell you reasons for it.

Some still cling to Fours. Some urge Eights and Twelves. But the weight of opinion favors the small-bore Six.

What would come of this conflict, think you, were the Super-Six not patented?

These Are the Facts

The Super-Six last year won all the worth-while records. In a hundred hard-fought contests, against all types, it proved itself supreme.

As for the Light Six, in our final perfection the Super-Six invention increased its efficiency by 80 per cent.

As for Eights and Twelves, our experience with motors of that type which we built made them seem to us unnecessary.

And the Super-Six has made the Hudson the largest-selling front-rank car. Last year it outsold any car with a price above $1100.

The Vital Supremacy

One may say, "I don't care for speed, or great reserve power, or a marvelous hill-climber."

Then why added cylinders, or extra valves, or anything else to that end?

You do want superlative capacity, whether you use it or not. You certainly want it when it means no added size or cost—when it means simply ended friction.

That's the great point. The Super-Six motor is small and light and simple. We have not aimed at excessive speed or power. We have simply minimized friction.

We have done—but done better—what every engineer has been aiming at for years. And for the same result—more speed and power, without added complications. Also multiplied endurance.

Endurance was the chief aim. It is friction that causes wear. We have so reduced it that we attain what is proved the greatest motor in the world. And certainly you want it.

What One Year Did

Mark how the Super-Six, in one year, sprang to the pinnacle place. There are now 30,000 running. This year brings nothing to rival it. So it is bound to gain multiplied prestige.

This year's bodies also give to Hudson leadership in style. The ablest artists and craftsmen gave their best to these models. Each is a study in motor car luxury. Each is a pattern type.

This year we add a great gasoline saver—shutters on the radiator—which by controlling the heat of the motor in part overcomes the disadvantage of the constantly falling quality of gasoline. We add a pneumatic engine primer. We add plaited upholstery.

Our patented carburetor—on Hudsons alone—is self-adjusting to every engine speed.

So Hudson supremacy does not lie in the Super-Six motor only.

When you buy a fine car—a car to keep—you are bound to want the Hudson. You want the car which outperforms and outshines other cars. If you want such a car this spring, we urge a prompt decision. Last year many buyers waited months for delivery.

Phaeton, 7-passenger	$1650	Town Car Landaulet	$3025
Cabriolet, 3-passenger	1950	Limousine	2925
Touring Sedan	2175	Limousine Landaulet	3025
Town Car	2925		

(All Prices f. o. b. Detroit)

HUDSON MOTOR CAR COMPANY, DETROIT, MICHIGAN

"Signed Lumber is Safe Lumber."

It's a pretty good idea (now that the lumber mills in the Southern Cypress Mfrs. Assn. are IDENTIFYING EVERY CYPRESS BOARD THEY SAW) to MENTION TO YOUR LUMBER DEALER, CONTRACTOR or CARPENTER — and to ASK YOUR ARCHITECT to SPECIFY—that YOUR CYPRESS MUST BE

"TIDEWATER" CYPRESS
IDENTIFIED BY
THIS TRADE-MARK
Stamped in the End of Every Piece
or APPLIED TO EVERY BUNDLE

TRADE MARK REG. U.S. PAT. OFFICE

When a manufacturer places his imprint indelibly upon his product it evidences to the consumer two factors of value which, together, are the sum total of all any buyer wants; these factors are integrity of purpose and complete responsibility on the part of the maker of the desired commodity.

The above legally registered "Tidewater Cypress" trade-mark is now *YOUR INSURANCE POLICY of LUMBER QUALITY.*

It appears stamped mechanically into the end of EVERY board and timber of

CYPRESS "THE WOOD ETERNAL."

Thoroughly dependable Cypress Flooring, Siding, Moulding, and Shingles, etc., which come in bundles, bear the same mark on EVERY BUNDLE.

The legal right to apply this epoch-making symbol of STRICT RESPONSIBILITY IN LUMBER MAKING AND SELLING is restricted to those Cypress mills which, by their membership in the Southern Cypress Manufacturers' Association, attest their devotion to its Principles of SERVICE to the CONSUMER. Only mills cutting "Tidewater" Cypress are eligible for membership. (Cypress which grows too far inland is not equally noted for the "Eternal," or decay-resisting, quality.) Only mills which subscribe to the Association's standard of scrupulous care in Methods of MANUFACTURE, INTEGRITY OF GRADING and ACCURACY OF COUNT can belong to the Association. These responsible mills the Association now licenses to CERTIFY THEIR CYPRESS by applying the registered trade-mark with their identifying number inserted.

TRADE MARK REG. U.S. PAT. OFFICE

BY THIS MARK YOU KNOW THAT IT'S CYPRESS, "THE WOOD ETERNAL," AND WORTHY OF YOUR FAITH. IT IS WELL TO INSIST ON SEEING THIS TRADE-MARK ON EVERY BOARD OFFERED AS "CYPRESS."

TRADE MARK REG. U.S. PAT. OFFICE

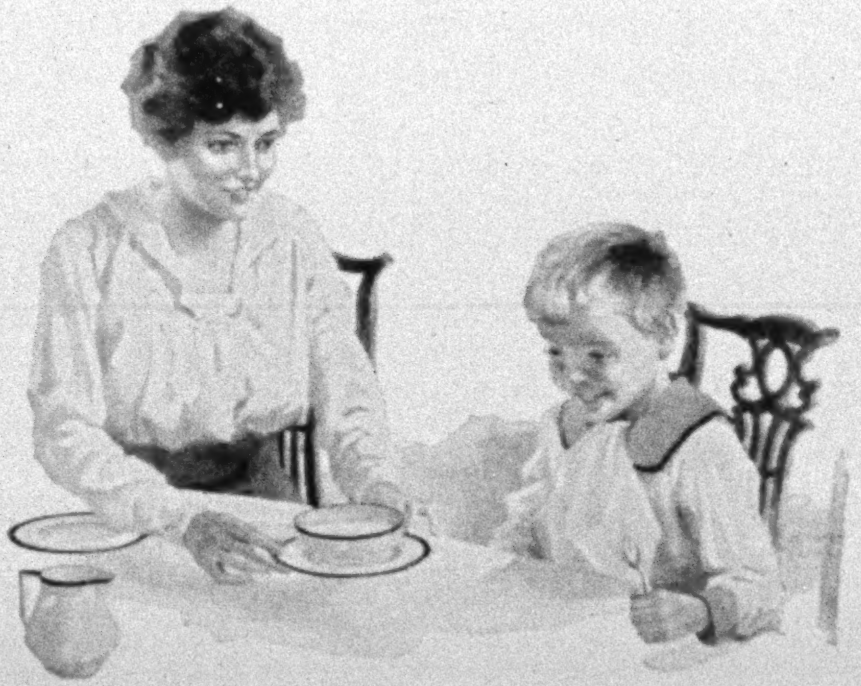
Let our ALL-ROUND HELPS DEPARTMENT help YOU *MORE*. Our entire resources are at your service with Reliable Counsel.

Southern Cypress Manufacturers' Association
1224 HIBERNIA BANK BLDG., NEW ORLEANS, LA., or 1224 HEARD NATIONAL BANK BLDG., JACKSONVILLE, FLA.

INSIST ON TRADE-MARKED CYPRESS AT YOUR LOCAL LUMBER DEALER'S. IF HE HASN'T IT, *LET US KNOW.*

Add Exploded Wheat Grains

And Make That Dish Complete



The bowl of milk is ideal food for noons or nights in summer. But what will you put in it?

Bread or crackers—made from just the inner parts of wheat? Why not all the wheat? Then you have in one dish all that human bodies need.

The Scientific Food

Puffed Wheat—invented by Prof. Anderson—stands first among the hygienic grain foods.

It is whole wheat puffed to eight times normal size. Every food cell is exploded, so digestion is easy and complete. All the food elements are made available.

After an hour of fearful heat, the grains are shot from guns, and a hundred million steam explosions occur in every kernel.

The grains come out like bubbles—flaky, toasted, crisp. When eaten, they seem to melt away. They taste like porous nut-meats.

Yet these delightful morsels—these seeming confections—are this premier grain food, fitted for digestion as it never was before.

Add these to the milk dish. Then you'll have a dish containing 16 foods in one.

Puffed Wheat **Puffed Rice**

and Corn Puffs

Each 15c Except in Far West

Flaky Titbits

Thin, crusty morsels to mix with fruit, or with sugar and cream, to make a morning food confection.

Like Bubbles

Airy, flimsy, toasted globules to float in bowls of milk. Very easily digested.

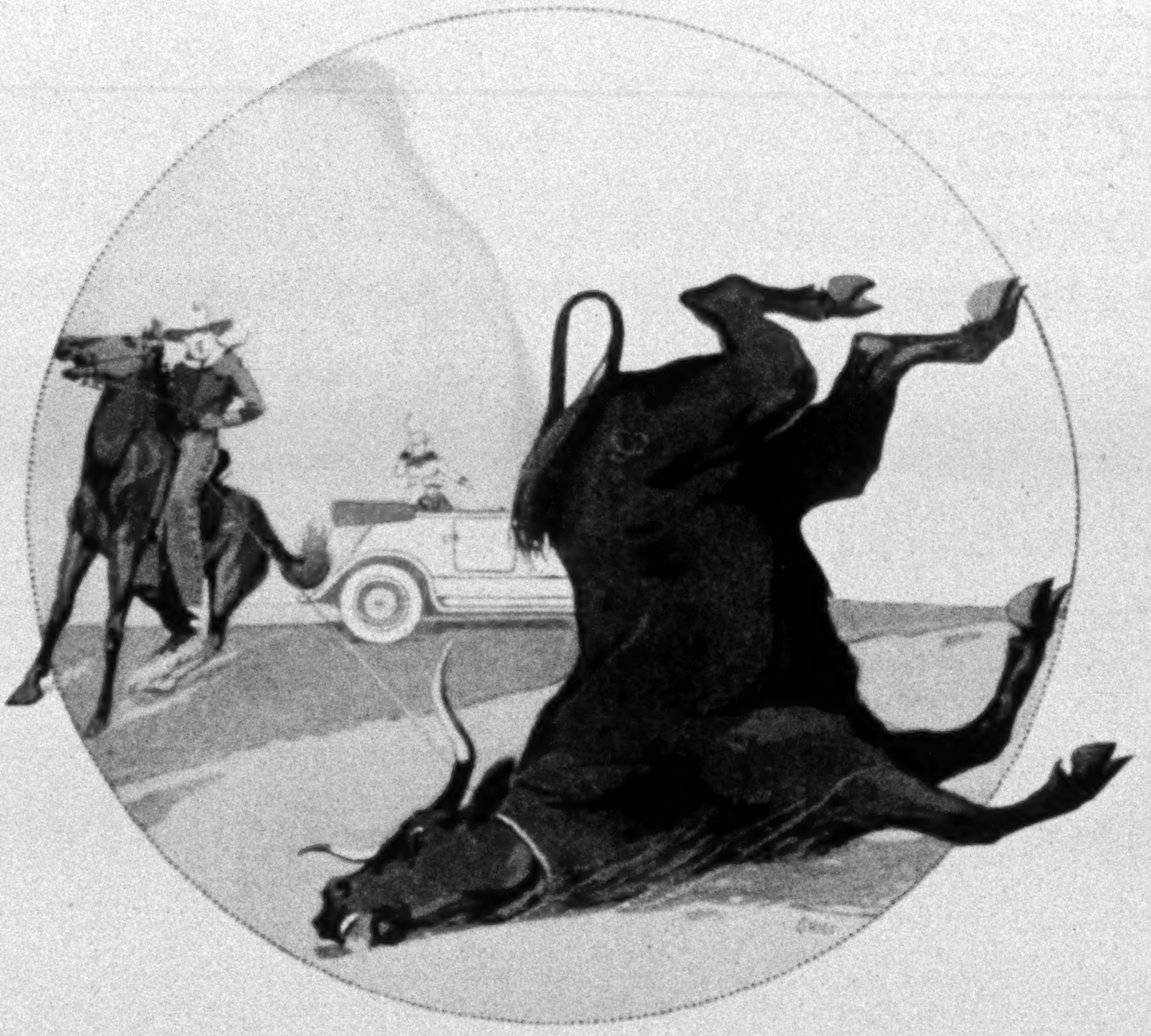
Keep well supplied in summer. Use in candy-making or as garnish for ice cream. Let hungry children eat them dry or doused with melted butter. Every ounce is an ounce of ideal nutrition.

The Quaker Oats Company

Sole Makers

(1580)

DURATEX
"BETTER THAN LEATHER"



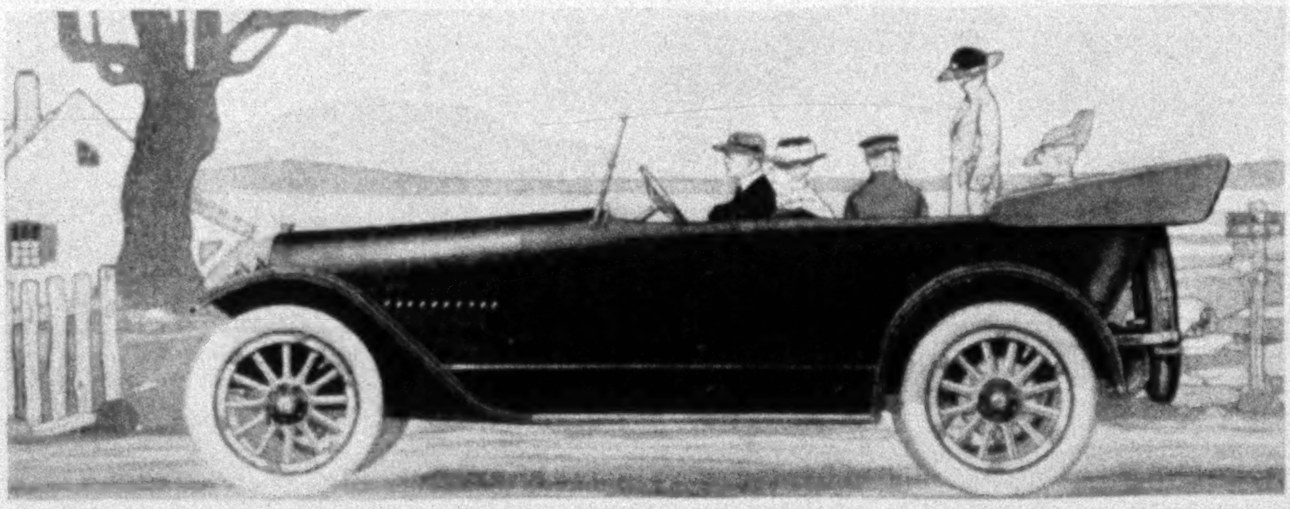
Leather has had its day

A new motor car upholstery is taking its place—DURATEX

Here is a material not only as fine as the finest leather but more comfortable—more durable and infinitely more beautiful.

And besides—no visions of the brutality and the endless slaughter involved in the production of leather can ever disturb the perfection of your comfort and pride in a car upholstered with DURATEX.

THE DURATEX COMPANY
Newark, New Jersey



Life-Long Service

Aimed at in This Double Strength

Perhaps men will tell you that no car needs 100 per cent over-strength. So we thought once ourselves. Our former margin of safety was 50 per cent.

But the greatest engineers—particularly in Europe—have long aimed at twice the needed strength. It was after a year in Europe that John W. Bate established that standard here.

This double-strength means a lifetime car. That meant less when types were changing. Now, with standardized cars, it means much.

It means safety, low upkeep, endurance. It means a car that stays new. We intend it to mean 200,000 miles of service. Two Mitchell cars have already run that far. One conspicuous result shows in springs. Not a single Bate cantilever spring has ever been broken. Yet Mitchell owners buy no shock absorbers, rebound straps, or snubbers to facilitate easy riding.

Other Extras

This 100 per cent over-strength is a costly Mitchell extra. In addition, there are 31 features which most cars omit. There is 24 per cent added luxury over our last-year models. And there are 10 exclusive body styles, all designed by our artists and built in our shops.

The Mitchell differs in a hundred ways. See these distinctions and judge them for yourself. They are all due to factory efficiency, as evolved by John W. Bate. On this year's output these extras cost us about $4,000,000.

Mitchell

SIXES

TWO SIZES

Mitchell—a roomy 7-passenger Six, with 127-inch wheelbase and a highly developed 48-horsepower motor.

$1460

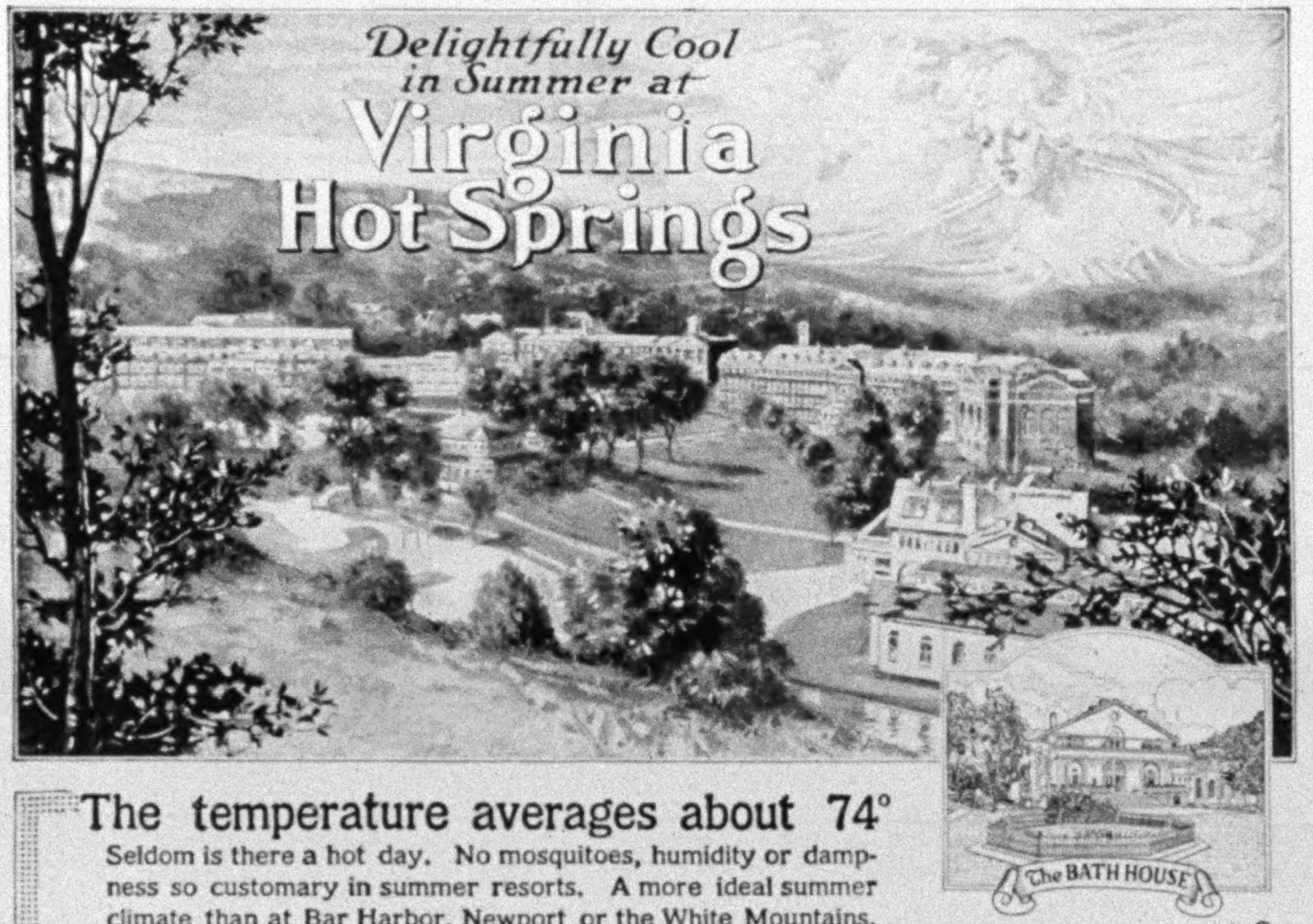
Four-Passenger Roadster, $1495.
Sedan, $2175. Cabriolet, $1895.
Coupe, $1995.
Also Town Car and Limousine.

Mitchell Junior—a 5-passenger Six on similar lines, with 120-inch wheelbase and a 40-horsepower motor; ¼-inch smaller bore.

$1195

All Prices f. o. b. Racine

MITCHELL MOTORS
COMPANY, Inc.
Racine, Wis., U. S. A.



The temperature averages about 74°

Seldom is there a hot day. No mosquitoes, humidity or dampness so customary in summer resorts. A more ideal summer climate than at Bar Harbor, Newport or the White Mountains.

Situated 2500 feet above sea level—never any extremes—Agreeable mornings, cloudless skies, balmy noons, wonderful and incomparable sunsets. It would be difficult to find a more delightful spot for a vacation. At no other place is there found such ideal conditions for rest, recreation and recuperation. No other resort offers so many advantages at such a reasonable price.

The Homestead Hotel

500 bright, airy rooms, elegantly furnished—Excellent cuisine—Incomparable drinking water—attractive ball room—Perfect equipment and service. Quiet, dignified and homelike in every appointment. **Many Diversified Recreations**—Two splendid, sporty golf courses. Seven exceptionally fine clay tennis courts. Fascinating drives. Interesting trails and bridle paths. 200 saddle and driving horses. Magnificent mountain scenery.

The Healing Water

(Naturally Heated 106°)

Baths given in water as it flows from springs. *Waters not artificially heated.* Hot Springs the only cure in the world where temperature prescribed for hot baths is that at which water actually emerges from earth. At none of the celebrated places in Europe are the waters as charged by nature with their gases and health giving qualities.

The Famous Spout Bath for Gout, Rheumatism, Nervous Diseases, Sciatica, Nervous Prostration, Liver Troubles and old joint injuries—Modern and complete bath equipment, Swedish Gymnastics, massage and hot air treatments—Needle, Spray, Electric, Medicated and other baths. Physicians of international reputation. Experienced and careful attendants.

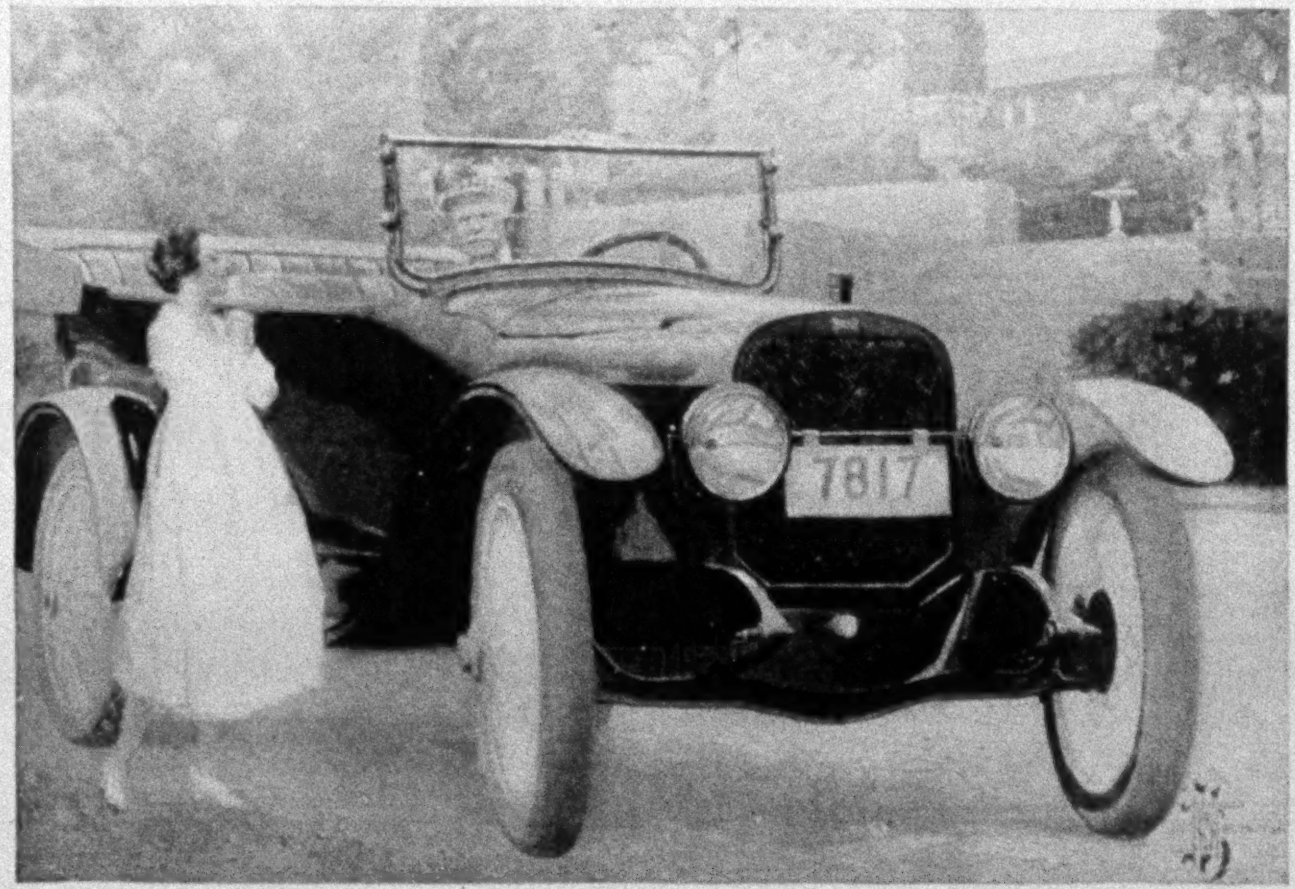
Not a single case of Infantile Paralysis at Hot Springs during 1916

The Homestead Book A lifelike photographic description of the HOMESTEAD HOTEL and its surroundings in natural colors—graphically illustrates and describes the many charms of this ideal summer resort and fully dilates upon the therapeutic values of the famous waters—We will gladly send copies upon request.

H. ALBERT, Resident Manager, Hot Springs, Virginia
Booking Offices—Ritz-Carlton Hotels—New York—Philadelphia

THIS IS NO PLACE FOR US

CHANDLER SIX $1395



Chandler Power IS Power

CHANDLER power is power on the hills and mountain-sides; it is power in the mud and sand.

Four years of skilful and conscientious manufacturing effort have developed and refined the Chandler motor to a point approximating perfection. Chandler owners long ago named it The Marvelous Motor, and now, more than ever before, it is the wonder Six, powerful, flexible and enduring.

On high gear and without apparent labor it pulls the hard, steep grades and winding hill roads where other motors shift to second.

In crowded traffic it responds to every demand.

On open roads it answers every call for speed.

The Chandler motor is a fact-motor.

What any Chandler will do every Chandler can do.

The Chandler Company has never built a special demonstrating car.

The Chandler Company has never furnished to any Chandler dealer a special gear ratio.

Every Chandler is a demonstrator.

FIVE PLEASING TYPES OF BODY

Seven-Passenger Touring Car, $1395
Four-Passenger Roadster, $1395 *Seven-Passenger Convertible Sedan, $2095*
Four-Passenger Convertible Coupe, $1995 *Limousine, $2695*
All prices F. O. B. Cleveland

Write us today for catalog and booklet "See How the Chandler Checks With High-Priced Cars."
This booklet tells how other medium-priced sixes do not check with high-priced cars.
Write today, and see your dealer. Address Dept. O.

CHANDLER MOTOR CAR COMPANY

New York Office: 1790 Broadway CLEVELAND, OHIO Cable Address: "Chanmotor"

You wouldn't burn your bridges

before you—yet it would be as logical as buying tires without making sure that the mileage, the strength, the vitality, are really there and have not partly disappeared at some stage of manufacture.

Miller Tires

GEARED-TO-THE-ROAD

are always good tires because the Miller method of vulcanizing retains all of the natural vegetable wax and oil of the cotton fabric, the backbone of the tire.

Because Miller vulcanizing is a scientific uniform process instead of merely educated guessing, every Miller Tire is a good tire and the Miller guarantee is something more than a basis for argument with the adjuster.

Why not profit by this?

Miller Tires are for sale by Geared-to-the-Road dealers and distributors everywhere.

THE MILLER RUBBER COMPANY, AKRON, U. S. A.

Manufacturers of the durable, economical, and light-weight Rhin-O-Hide Fibre Soles for men's and women's shoes.

Miller "Money Saving Accessories" have saved many expensive tires from premature ruin. Write today for the "What To Do" Book. It's free.

It illustrates and shows the cause of common tire injuries and explains how tires, though badly injured, may be saved at slight expense.

JOHNS-MANVILLE ASBESTOS ROOFING

JOHNS-MANVILLE SERVICE
COVERS THE CONTINENT

Cleveland Museum of Art
Cleveland, O.
Hubbell & Benes Archts

This Monumental Building has a Monumental Roof

WHEN you look at this enduring monument to art—its grace, its repose, its beauty, all unite to express one thought eloquently—permanency. It is a valuable building; its contents almost priceless. So it is made of the best materials obtainable. It has a Johns-Manville Asbestos Roof.

This doesn't mean that it has an expensive roof, because over a period of several decades, or as far into the future as you care to think, it will need no coating or painting because it is all mineral. And during your life and even those of your children it will still be guarding the art treasures beneath it from weather and fire.

Any building can have a Johns-Manville Asbestos Roof. Your building can have the same protection—an all mineral roof (Johns-Manville Asbestos and natural asphalt) that's immune from all roof diseases.

There is a Johns-Manville Asbestos Roofing for every roofing purpose, and all of them are protected by

Johns-Manville Roofing Responsibility

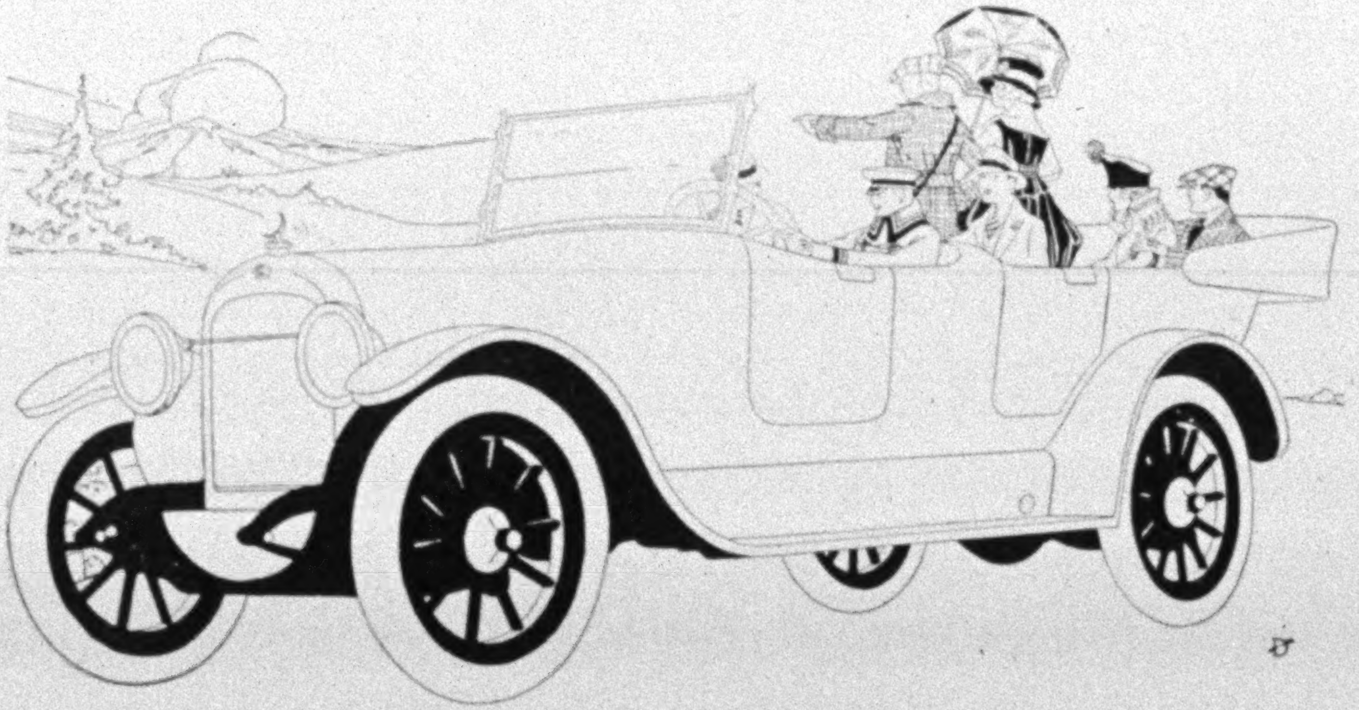
—a principle that protects the users through an exclusive system of registration. When you register your roofing it is then our obligation to see borne out every claim made for it, so that you will be completely satisfied with its service.

H. W. JOHNS-MANVILLE CO.
New York City
10 Factories—Branches in 55 Large Cities

Asbestos Built-Up Roofing for flat surfaces; Asbestos Ready Roofing for sloping surfaces; Transite Asbestos Shingles.

* * *

All the Johns-Manville Asbestos Roofings listed here are examined, approved and labeled by the Underwriters' Laboratories, Inc., under the directions of the National Board of Fire Underwriters.



THE Moon car is designed to appeal to people who are distinguished from the masses by higher ideals—not necessarily by larger bank accounts.

It meets their requirements in looks, comfort and service. Its superb coachwork—exclusive upholstery and grace of design lend charm and beauty to its reliable mechanical construction.

MOON CARS

A few Moon features

Red Seal Continental motors—Rayfield carburetors—long wheel base—Delco starting, lighting and igniting—one-man top—extra long springs—complete chassis and body equipment.

The Moon Sixes

Six-43—5-Passenger Touring Car—$1395
Six-45—4-Passenger *Club* Roadster—$1485
Six-66—7-Passenger Touring Car—4-Passenger *Club* Roadster—$1750

MOON MOTOR CAR CO., ST. LOUIS, U. S. A.

Prices subject to advance without notice.

Kelly-Springfield Tires

Some people have luck; others have Kelly-Springfields. The trouble with luck is that it isn't a thing you can count on.

Our Service—

Its Distinctive Features

No. 3—Securities Previously Purchased

Investors who desire current and relevant information regarding securities in their possession are at liberty to utilize the facilities provided by our Service Department.

This service includes the appraisal of values, the status of bonds under the Income Tax Law, the legality of bonds and their adaptability to your specific requirements.

Correspondence invited

The National City Company

National City Bank Building
New York

America's Greatness

EVERY first mortgage bond, safeguarded under the *Straus Plan*, is in the broadest and truest sense an investment backed by the nation's prosperity and greatness.

SECURITIES founded on the land and the improvements thereon, which give it value and earning power, are always least affected in a period of stress, such as war-time.

WRITE for our booklet "Acid Tests of Investments in War-Time," and for our list describing sound first mortgage serial bonds based on the land, netting 5½—6%.

Ask for Investment List No. E-708

S.W. STRAUS & CO.

Founded 1882 Incorporated 1905
NEW YORK CHICAGO
150 Broadway Straus Building

Branch Offices:
Detroit Minneapolis Cincinnati
Boston San Francisco Kansas City
Philadelphia Dayton Rochester

35 years without loss to any investor.

ESTABLISHED 1865

Diversified Investments For Your Present Funds

Successful, experienced investors agree that for utmost safety it is advisable to select investments secured by properties of varied character and location.

We have an exceptionally broad list of diversified 5½% and 6% securities in denominations of $100, $500, and $1,000, suitable to the most exacting requirements. We offer, and particularly recommend for your present funds, four bond issues secured by these different classes of property: Established Industrial Property; Farm Land; Improved Chicago Real Estate; Natural Resources.

Recommendations are based on long experience, complete investigation by our experts, and outright purchase. Write for Circular No. 982D, giving details.

Peabody, Houghteling & Co.

(Established 1865)
10 South La Salle Street, Chicago

Alaska in Summer

Summer Alaska! What a surprise this mystic mountain-land of flowers and sunshine holds for those who have pictured Alaska as eternal winter. Come this summer to the Land of the Totem Pole, where age-old symbols of a primitive people—the Esquimaux—add to the thrills of the midnight sun and the Northern Lights. Travel over the

Grand Trunk Pacific

The Canada-Alaska Scenic Sea Route. See the Canadian Rockies at their highest and best, all the way through British Columbia to Prince Rupert. Thence by the famed Grand Trunk Pacific Steamships to Alaska. All points of interest reached, including Jasper Park, Mt. Robson (Canada's greatest mountain), Juneau, Wrangell, and Skagway. Return, if desired, via Vancouver, Victoria, or Seattle.

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THE NATIONAL GEOGRAPHIC MAGAZINE

ON THE MONASTIR ROAD

By HERBERT COREY

THE story of Macedonia today is the story of the Monastir road. Along this highway Alexander and Xerxes and Galerius once tramped with their legions. It has been the link between the Adriatic and the Ægean seas ever since history was written.

For centuries it has carried its ox-carts with their solid wooden wheels, and long trains of donkeys and peasant women bowed under packs. Serb and Bulgarian raiders have descended on Saloniki along it. For thirty centuries fighting men and peasants and thieves and slaves have marched through its bottomless mud.

Today it is kaleidoscopic as it could never have been in the worst days of its bad history. To the ox-carts and donkeys have been added great camions and whirling cars filled with officers in furs and gold. Natty Frenchmen in horizon blue, Englishmen in khaki, Italians in gray green, Russians in brown, Serbian soldiers in weather-washed gray, bead its surface. Fezzed Turks are there and Albanians in white embroidered with black, and Cretans in kilts and tights and tasseled shoes.

COLOR AND MOVEMENT FILL THE ROAD TODAY

Airmen, so wrapped in furs that they remind one of toy bears, dash by in cars that are always straining for the limit of speed. Arabs, perched high on their little gray horses, direct trains of the blue carts of the French army. Gaudy Sicilian carts with Biblical scenes painted on their sideboards are dragged through the mire.

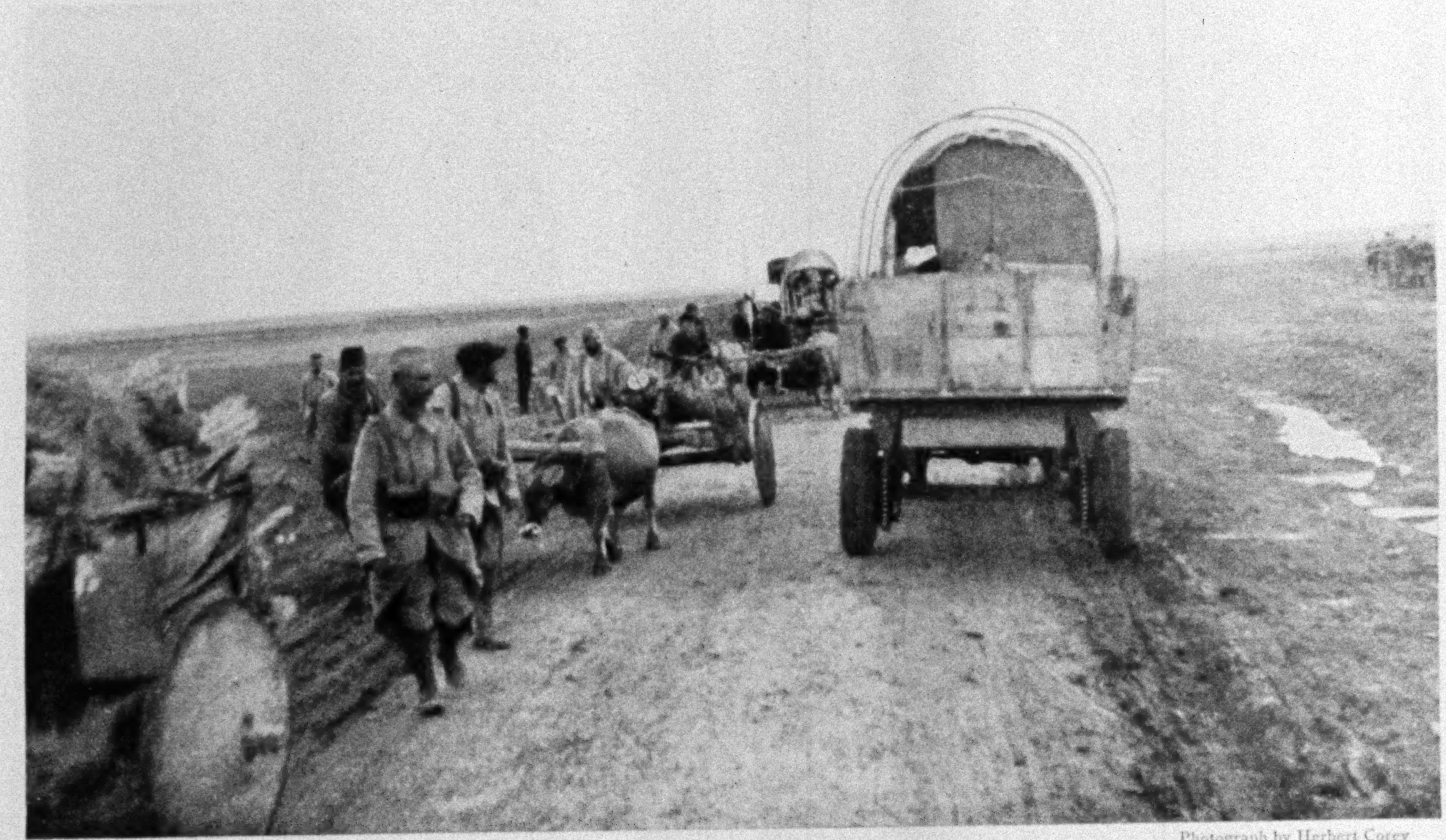
Senegalese soldiers, incredibly black, watch with an air of comical bewilderment the erratic ventures of donkeys that seem to have been put under pack for the first time. Indo-Chinese soldiers in pagoda-shaped hats, tipped with brass, putter about at mysterious tasks. Blackish-brown men from Madagascar carry burdens. Moroccans in yellowish brown swing by under shrapnel helmets.

SOLDIERS OF ALLIES TREAD HISTORIC GROUND

New levies marching toward the front, the sweat beads standing out on their pale foreheads as they struggle under their 60-pound packs, give the road to the veterans of six months' service—hard, capable, tireless. Overhead the fliers purr on the lookout for the enemy. Big guns lumber along behind caterpillar tractors. Ammunition dumps line the road and hospitals dot it. Girl nurses from France and the United States and all the British Empire ride over it.

Always the ambulances are there. They are always given the road. The men who turn out for them anticipate the day when, in their turn, they will be riding in a Red Cross car toward Saloniki and home.

At the farther end of the road is Monastir, taken last winter by the Allied forces in a battle that in any other war would have been set down as great. At



Photograph by Herbert Corey

SCENE ON THE MONASTIR ROAD

Showing the ox-carts, which are the final dependence of the transportation department on these muddy roads, pulling to one side for the French camion, which offers express speed in fine weather the sea end of the road is Saloniki, the Allied base, where Cicero lived for a time and St. Paul shook the dust from off his feet as a testimony against the Thessalonians of his day, and where Suleiman the Magnificent built the White Tower, in whose oubliettes bones still moulder of the victims of 500 years of Turkish rule.

At right angles to that road, as though they were the bent bow of which the road is the arrow, are half a million fighting men of the Allied forces. Not many in this conflict, perhaps. Macedonia is rarely mentioned in the communiques. Yet the British did not employ so many men in South Africa during the whole Boer War. In one day I have counted the uniforms of twenty fighting peoples on the road.

Campaigning in Macedonia differs for the correspondent from campaigning elsewhere. In the greater armies in the greater fields a correspondent is cared for, guarded, watched, night herded. Everything is provided for him except his uniform and his wrist watch. He rides out in fast cars; he is taken to high hills from which to watch the distant action; he sleeps in hotels of differing degrees of excellence.

In Macedonia he first secures credentials permitting him to visit the Allied armies; then he buys an outfit—tent, cooking pots, blankets, water bucket—all complete; headquarters gives him an orderly, and he takes to the road. Things begin to happen.

WANDERING IN MACEDONIA HAS A SPORTING FLAVOR

I found myself occupying a position somewhere between that of an honored guest and a hobo. Although permission was given me to visit the other units, I was formally attached to the Serbian army. The Serbs would be the most generous hosts in the world if they could be, but they have so little. They are the poor relations of the Allies. They are armed with the old St. Etienne rifle which the French discarded. The artillery in support has been cast from other fronts. Their surgeons are borrowed surgeons, for the most part.

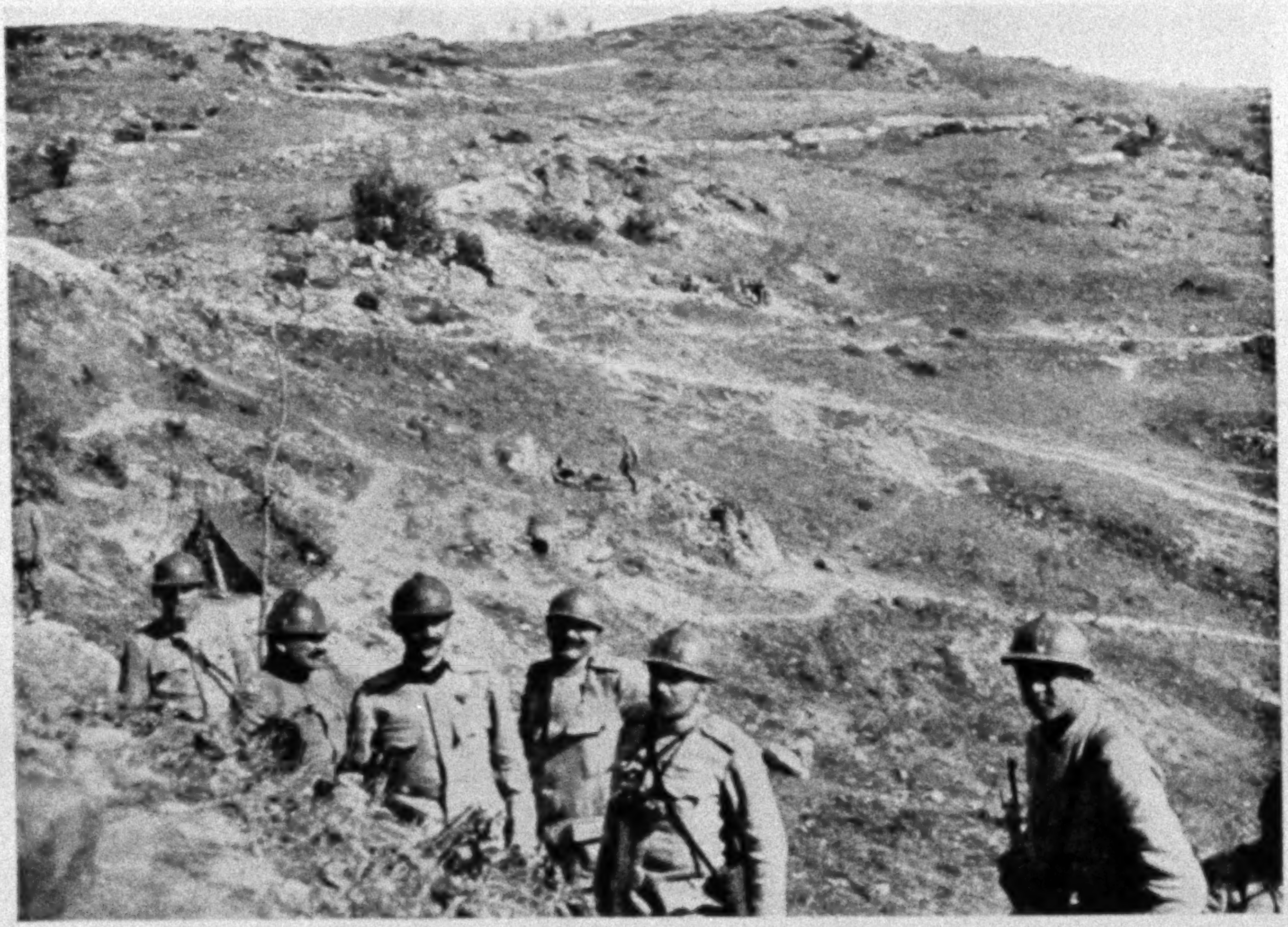
They are uniformed and fed by the French and Great Britain loans them money. They never have enough cars, even for staff use. Sometimes they have not enough food. But they always have enough ammunition and they find enough fighting for themselves. Doubtless I am influenced by my affection for the Serbs. Later I shall tell why I think this army is today—what little there is left of it—the most efficient fighting force in the war.

There were moments when I found myself at the right hand of a general, dazed by the earnestness with which some officer was responding to the toast "America." That same night I might be traveling by freight train to another point of the front. If I was very lucky the orderly found an empty box car. In it he would erect the camp cot and provide canned food and candles and reading matter and then go away to tell his mates in the next car of the eccentricities of the foreign Guspodin.

HEROISM OF SERBS IN 1916 CAMPAIGN

If it was raining—it usually was raining—it ordinarily fell to my lot to ride on a flat car. Sometimes I crouched under a canvassed gun on its way to the front. It was no drier under that gun. It did not even seem drier. But the silent guardsmen gave me the place as the place of honor. It was the one courtesy in their power to show.

Last winter's campaign of the Serbian army was one of the most heroic on any front in this war. I do not mean to compare the Serb with his allies to the disadvantage of the latter. He was at all times loyally supported. If it was the generalship of Voivode Mischitch and the incomparable courage and endurance of his men that directly resulted in the capture of Monastir, this could not have been accomplished except for the frontal attack by the French through the plains of Monastir or the bulldogging by the British of Turk and Bulgarian in the swamps of the Struma and the wet trenches of the Vardar. But it is only fitting that what the Serb has done should be made known. Let us go back a little.



Photograph by Herbert Corey

SERB SOLDIERS WEARING FRENCH TRENCH HELMETS MAKING THEIR WAY UP A PATH ON DOBRAPOLYA MOUNTAIN

In the background are the lines of trenches, while the roads leading to the valley are shown in the middle distance

The Serbian army began the great retreat of 1915 250,000 strong. Not more than 150,000 reached asylum on the island of Corfu after the winter's fight through the snow-filled passes of Albania and Montenegro. In the confusion of those days some one had forgotten. There was not sufficient food or clothing or medicines or nursing waiting them. Men who had struggled through the winter died on the open beaches of the island of Vido.

Dying men dug their own graves and then dug the graves of the men already dead. Not more than half were fit to serve again when the fall campaign of 1916 began.

AN ARMY OF OLD MEN IN THE FIGHTING LINE

It was a sad army—a bitter army—but not a despairing army that I accompanied last winter. Many of these men were "cheechas," in the Serb phrase. When a man reaches the age of forty he becomes "uncle" to his neighbors. Some of these men were in the fourth line before the war.

Serbia to the Serb peasant means the little white cottage, the plum orchard, the ten acres of ground. Few of them had been fifty miles away from home when war began five years ago in the Balkans. Fewer have seen their homes since. They have received no news from their wives and families, for the Austro-Bulgarian censorship has been extremely severe. They had seen their comrades die. Most of them—three men out of five in some units—had been wounded at some time during the war.

There were no songs upon the march except during those vivid days when the Bulgarians were being forced out of Monastir. There was no light-hearted talk about the camp fires. There was no music, except that now and then one heard the weird and complaining tones of a one-stringed fiddle which some patient soldier had made out of the material

Photograph by Herbert Corey

WHERE NATURE MAY BE EITHER ALLY OR ENEMY

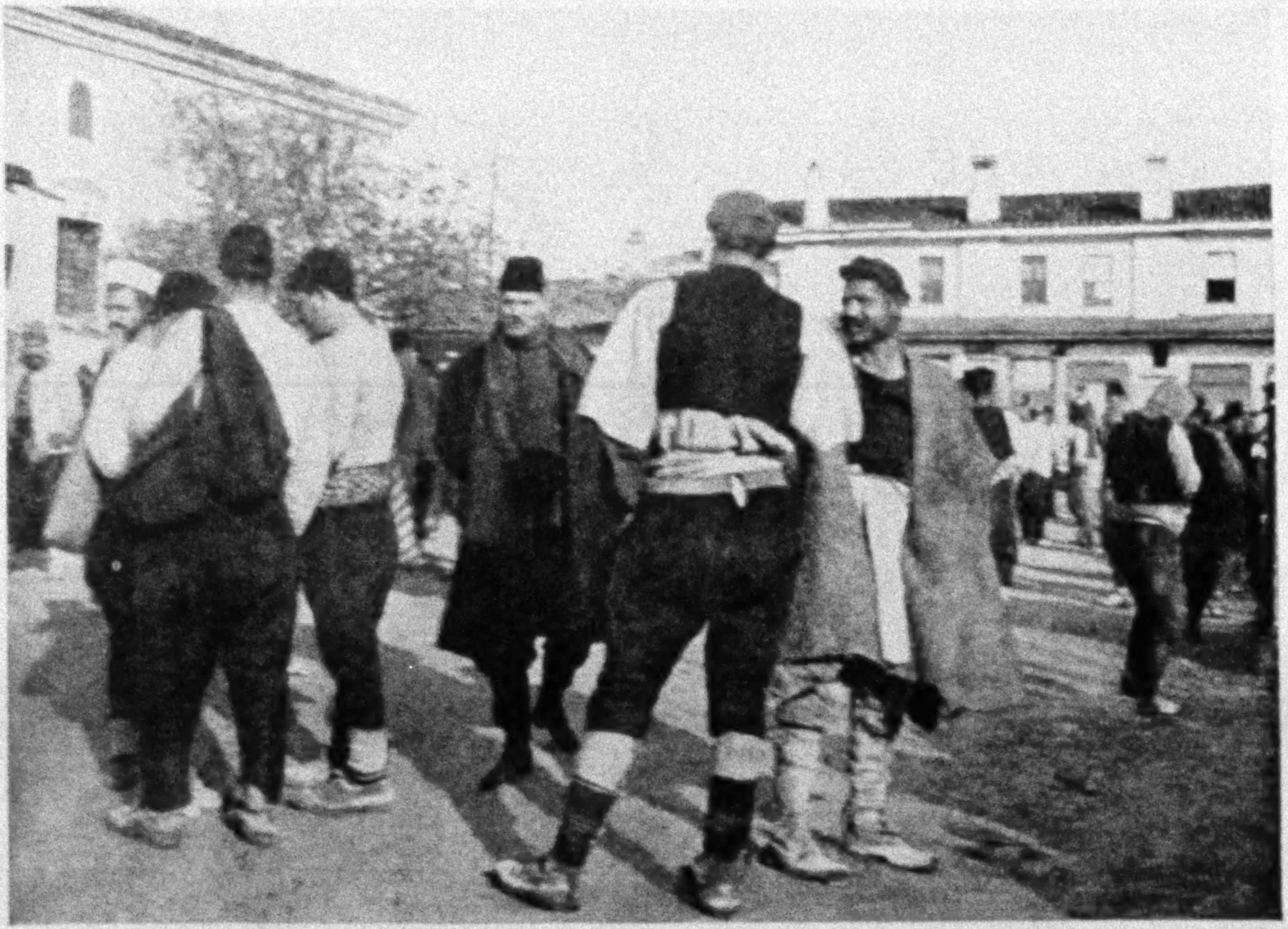
The picture gives an excellent idea of the country through which the Serbian army forced the Bulgarians during the drive at Monastir. The mountain in the distance is Sokol.

at hand. They kept to themselves or in little groups of twos and threes. At night scores of tiny fires would sparkle in the open land on either side of the Monastir road, where the paired comrades were cooking their evening meal. They marched badly, slowly, slouching, their old shoulders bowed under their packs, their grizzled faces deeply lined. Yet these men were the cutting edge of the weapon that bent back the Bulgarian lines.

One division—the Morava—remained in the aggressive for 95 days without rest. During that period they had but one trench—the front trench. They had no second line, no reserve, no rest camp.

One regiment of the Choumadia division lost 1,100 out of 1,400 men in taking Vetternik Mountain, and then held that mountain under fire from the Rock of Blood, which dominated the summit, for 20 days until relief came. Even then the men of the regiment which had been so nearly wiped out did not go to rest. They stayed on Vetternik.

In the taking of Kaymakchalan half of some organizations were killed outright. They were enabled to do these things partly because of the experience



Photograph by Herbert Corey

MACEDONIAN TYPES AT SOUBOTSKO ON A MARKET DAY

"But there is always something at hand which marks this land as the East. . . . It may be a cynical and discontented peasant in a town that has escaped injury."

gained in five years of almost constant fighting. Another factor was the spirit of the men. They no longer hoped for anything for themselves. They expected to die. Those who still remain expect to be killed in action. But they intend that the bill of Serbia shall be paid.

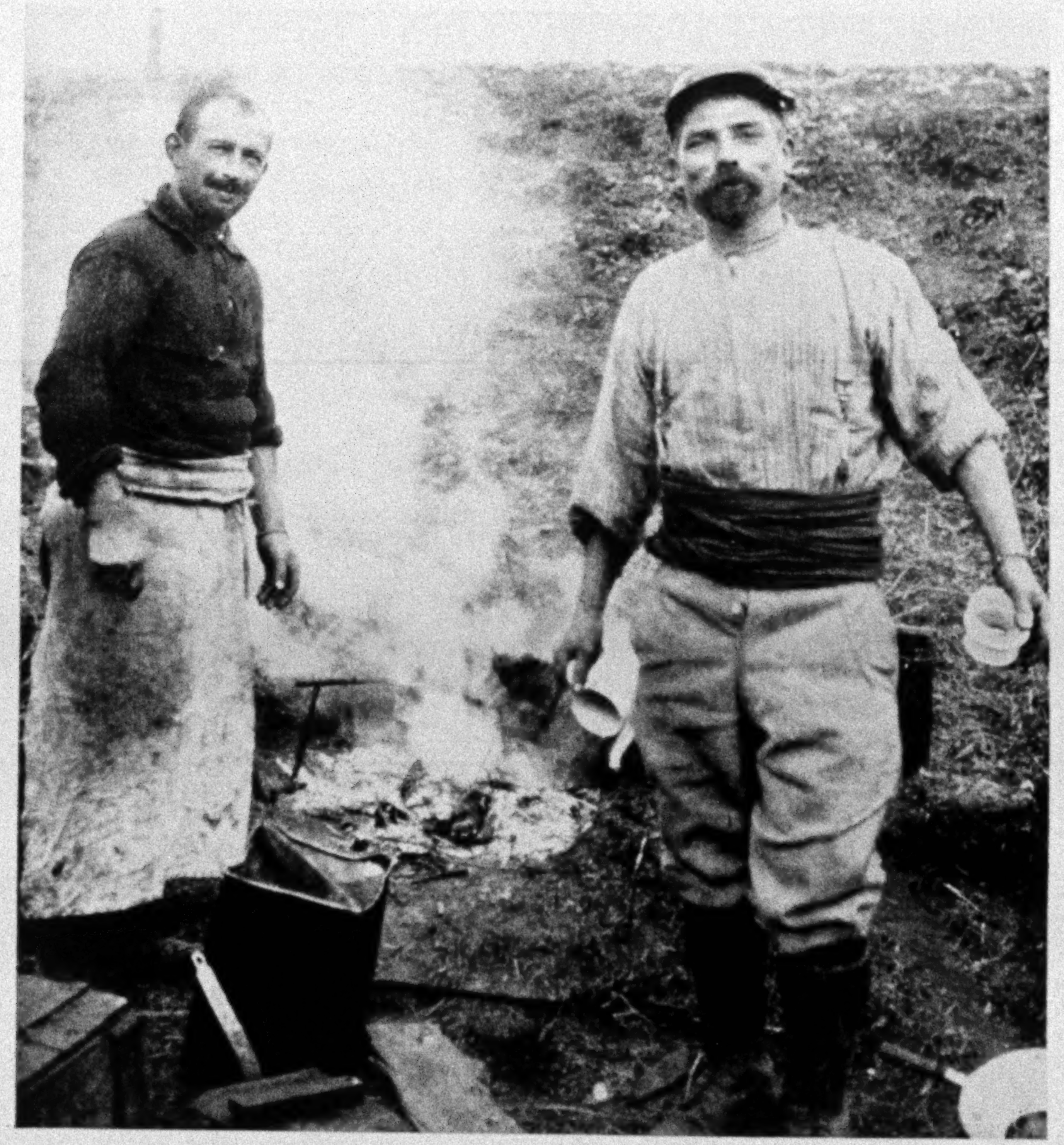
If one could forget the foreground, a Macedonian winter landscape would remind one of Wyoming or Montana. There are the same brown, shallow swells with patches of scrubby brush. There are the same washed-out ravines, the same distant hills clothed with dark wood, while here and there a great bare eminence thrusts upward. Shepherds herd their sheep within sound of the guns. Women wash their clothes at the river side, and do not even look up when the infantry tramp by on the Monastir road. Little black, galloping figures might be cowboys if the glasses did not prove them to be uniformed men.

But there is always something at hand which marks this land as of the east. It may be a Turkish drinking fountain through whose old pipes the water still trickles. Perhaps it is a Turkish graveyard — neglected, weedgrown — among whose tumbled stones the cattle graze. It may be a cynical and discontented peasant in one of the towns that has escaped injury.

"Neither Bulgar nor Serb," said one such old woman, defiantly, when we left the Monastir road at Dobraveni. "I am Macedonian only and I am sick of war."

MASTERLESS DOGS ROAM THE BARREN HILLS

And everywhere are the dogs. In this country of shepherds every peasant's cottage has a moving fringe of dogs. In the East the dog is neither fed nor petted, so that he feels himself outcast and despised. During this war first one army and then the other has swept over northern Macedonia, driving the peasants before them. The dogs have been left behind. At night one hears them howling on the desolate hills.



Photograph by Herbert Corey

A FRENCH COOK JUST OUTSIDE OF MONASTIR

Despite the fact that the Bulgarians were at the moment shelling the camp heavily, his one concern was to assume a properly martial air

The tainted breeze that comes down the valley hints at the ghastly food on which they live. By day every man shoots at every dog save the few that cling close to an inhabited cottage. They slink, coyote fashion, behind rocks. At night one hears their feet padding behind him on the lonely roads. Their eyes shine in the flare of the electric torch. Every one carries arms in Macedonia at night, not against man, but as a protection against the dogs.

The fighting here has been of an oddly personal character. On the western front war is confusing in its immensity. Hundreds of guns roar. Thousands of men advance over a front miles long. One as completely fails to comprehend in detail what is going on as though he were caught in an earthquake. Here operations are watched in the open. One crouches in an artillery observation post on the tip of a hill and watches the little gray figures go forward to the charge on the slope opposite. Sometimes they are broken, and one sees them run down hill

THE MAN WITH PEAKED CAP AND PIPE IS A NOTED SWISS CRIMINOLOGIST INVESTIGATING CONDITIONS IN THE RECAPTURED PORTION OF SERBIA AT THE REQUEST OF THE SERBIAN GOVERNMENT

Photographs by Herbert Corey

A GROUP OF ENGLISH, FRENCH, AND SERBIAN OFFICERS AT SAKULEVO, ON THE SALONIKI FRONT

Photograph by Herbert Corey

TWO WOUNDED SERBIAN SOLDIERS BEING CARRIED TO THE FIELD HOSPITAL ON A WING-TYPE MULE LITTER

Compassionate comrades are giving them a drink of water from an old Turkish fountain

again, dodging from rock to rock, hiding in the crevices of the surface.

Occasionally the drama takes on an intimate—almost a neighborly—touch. Five cold men of the Choumadia division became aware last winter that in the Bulgarian dugout just opposite their post—not 50 feet away—three fur-coated officers often met.

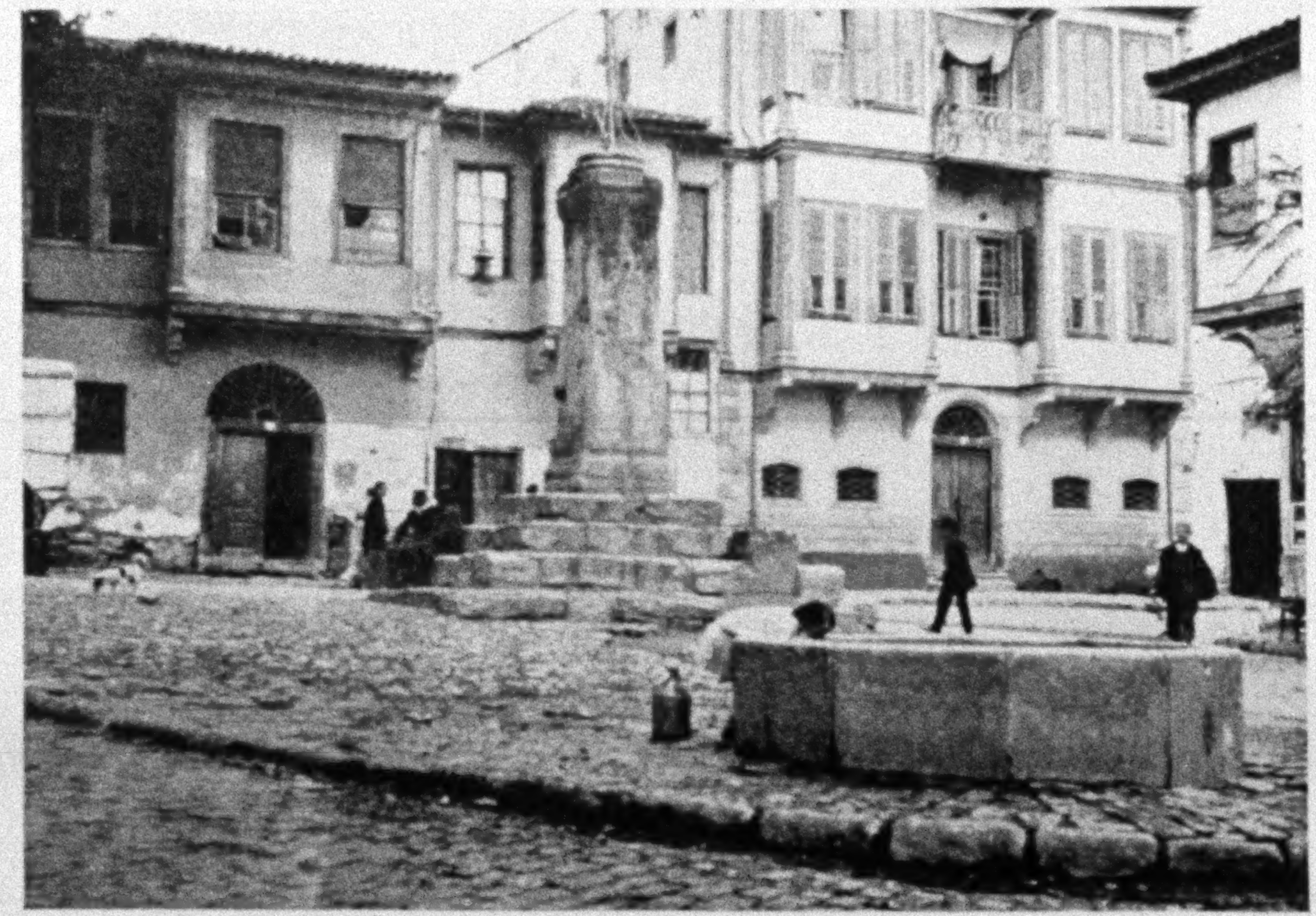
"Let us get the fur coats," said the five cold Serbs.

The story of the getting is too long to be told here. But during the two weeks in which the five cold men intrigued and maneuvered for those three fur coats their entire regiment became aware of the play and watched it as one might a particularly entertaining movie. In the end the five cold men succeeded. Lives were lost on both sides; but that is beside the point. From the colonel down the men of that regiment rejoiced over the strategy of the five cold men. For the remainder of the winter they luxuriated in fur. The bitter winds of Dobrapolyi Mountain had no terrors for them.

There was the old woman of Polok, too. Polok is hardly a hamlet. It is just a huddle of stone huts, stained by the ages, each crowned with a blackened and disheveled thatch. For weeks the Serbs attacked Chuke Mountain, in a dimple of whose shoulder Polok rests. Each day the village had been under bombardment. The artillery observers from their high posts could see the lone old woman going about her business. No other peasants were seen in Polok; but she milked her cows and drove them to water, as though peace reigned in the land. Once she was seen chasing a group of Bulgarian soldiers with a stick, as though they were a parcel of mischievous boys.

Twice the hamlet was taken in hand-to-hand fighting and lost again. The third time the Serbs held it.

The old woman picked her way down the cluttered hillside, past the dead men and the wounded, and through the shell holes and amid the ruins of the other huts, until she found the officer commanding:



Photograph by Herbert Corey

"ST. PAUL'S ROCK" IN SALONIKI

According to a local tradition that has persisted for centuries, St. Paul fulfilled in Saloniki the scriptural injunction of "shaking off the very dust from his feet" as a testimony against the Thessalonians of his day. That they took to heart his act is witnessed by this historic rock on its three-step pedestal.

"And who is to pay me for my cow?" she asked. "What have I to do with your war? I want pay for my cow that is dead."

GERMAN FLIERS WATCH THE ALLIED PLANS

Sometimes the enemy fliers visit the Monastir road. On many a pleasant day they fly over Saloniki, 100 miles distant from their lines, on missions of reconnaissance. It is desirable to know how many ships there are in the harbor, for in this way they can keep an eye upon the Allied plans.

It is not often that they drop bombs. Usually they come at the noon hour, when all leisured Saloniki is taking its coffee in front of its favorite café. No one goes to shelter; it isn't worth while. Perhaps no bombs will be dropped, and if bombs are dropped experience has told those beneath that running and dodging are futile ways in which to attempt to escape.

It is not this conviction of futility, but real indifference, however, which keeps most men and women in their seats. They are "fed up" on aëroplanes, as the British say.

Sometimes this indifference is carried to an extreme. One day I visited for the first time a hospital on the Monastir road. There were pretty girl nurses there—several of them. Next door was an ammunition dump. Further on were hangars for the war fliers. On a recent visit an enemy plane, no doubt intending to bomb the ammunition depot, had dropped bombs instead in the midst of the hospital tents.

The surgeon in charge was a practical man of forethought and reason. He had funk-holes dug all over the place—many funk-holes. No matter how unexpectedly a flier appeared, one had but to dive for the entrance of a funk-hole. It was somewhat rabbity, perhaps, but the plan was sound and safe.

"Boche coming," trilled one of the pretty nurses.

Photograph by Herbert Corey

OPEN-AIR BARBERING AT IVEN

Where one of the most noted Serbian divisions, that of the Morava, had its camp at the time. Two peasant children are watching the operation.

"To the funk-holes, girls; hurry," said the doctor.

He stood at the mouth of his individual funk-hole and waited. Like a captain whose duty it is to stand by his ship, he felt that he must see his nurses secure. They had but to get into the bottom of the funk-holes and take a half turn to the left and there they were safe—at least as safe as could be expected.

NO ONE WORRIES ABOUT BOMB DROPPERS

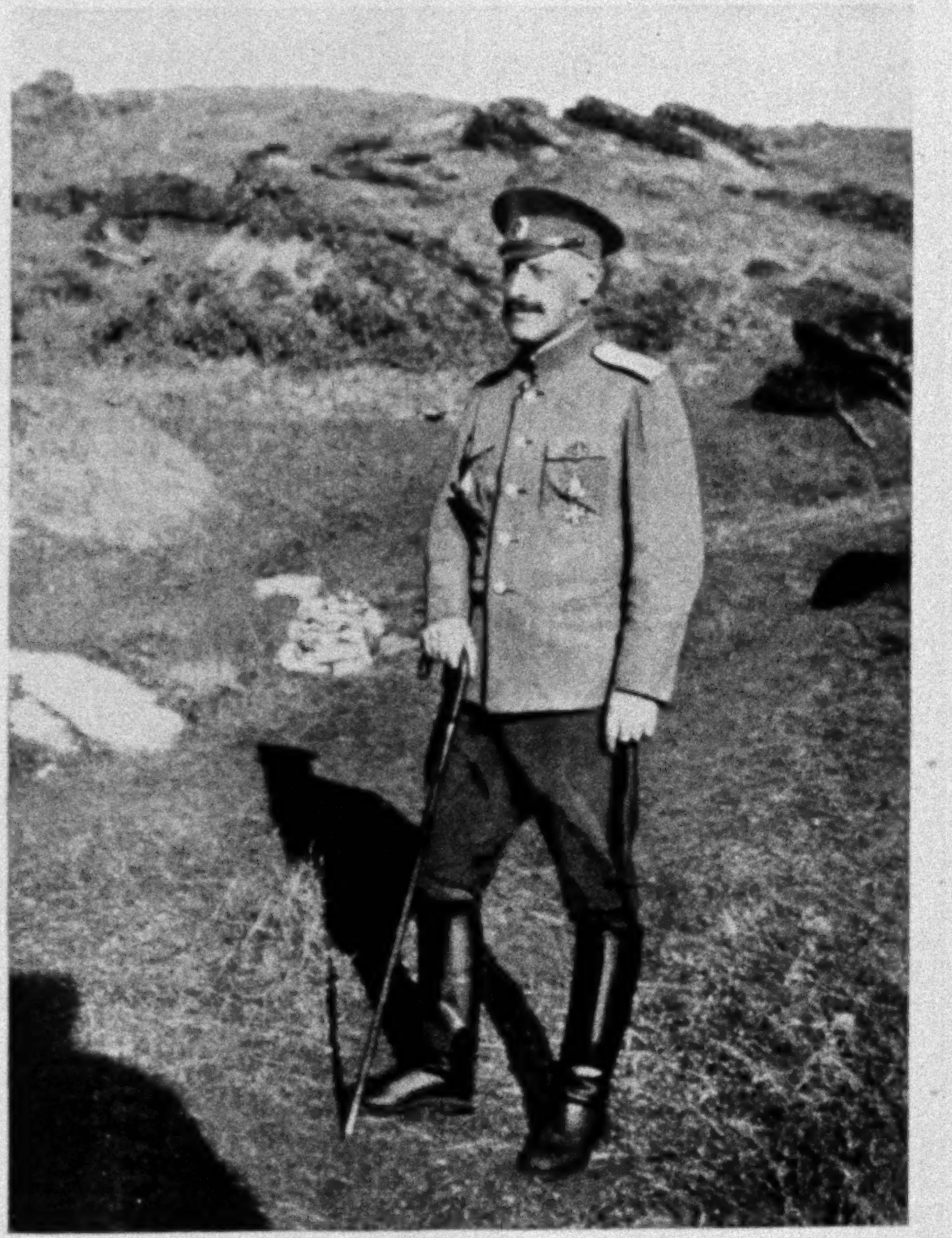
The girls ran. But instead of running to the funk-holes they ran to their tents and produced minute cameras, each having a possible range of about 40 feet. They stood there in the open and snapshotted the flier and uttered small, excited squeaks of satisfaction. The doctor did not go down into his funk-hole. He showed a regrettable lack of moral courage. I could not go either, for I was talking to the doctor.

Always the Monastir road is lined with road-menders. Some wear the dirty brown uniform and the Russian cap of the Bulgarian army. They are not particularly happy, but they are frankly at ease. Broadly speaking, the Bulgarian does not seem to know what the war is all about. If it were only to fight the Serb, he would not mind. He has always fought the Serb. He dislikes the Serb quite as cordially as the Serb detests him. But he remembers that only a little while ago he was at work, having just returned to his farm from the last war, in which he fought the Serb to his heart's content.

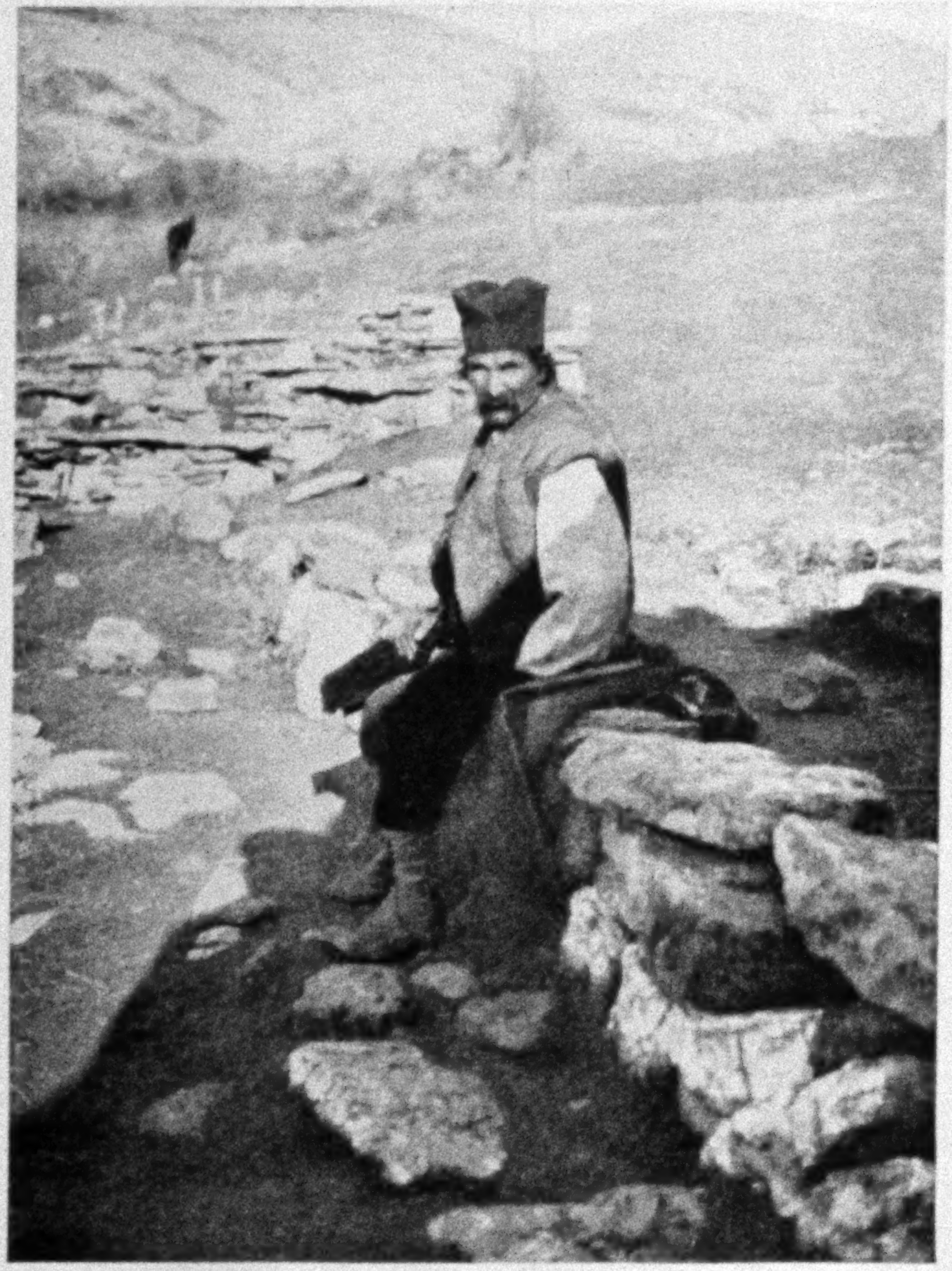
This time he was called out to fight Great Britain and Russia, countries which have always been known to the Bulgarian as his country's friends. He is puzzled and says so. Very often he is so puzzled that he deserts.

GERMANS BOSS THE ROAD MENDER OF THE MONASTIR ROAD

If there are helmeted Germans on the road, they are the gang bosses. The German is an excellent gang boss. His Bulgarian underlings are made to work much



GENERAL LEONTIEFF, AT THE MOMENT IN COMMAND OF THE FOURTH BRIGADE OF THE RUSSIAN ARMY IN MACEDONIA



A "CHEECHA" SUNNING HIMSELF ON THE WALL, AGAINST THE TIME WHEN HE MUST RETURN TO THE TRENCH

Photographs by Herbert Corey

harder than when a Serbian soldier is bossing them, for it must be admitted that the Serbian sympathizes with people who do not like to work.

Driving along the roads, one finds Bulgarians asleep under bushes, stretched face down on the sand, examining their foot-gear, doing anything but work. In that case one is very apt to see a complaisant Serbian sentry sitting under a rock not far away, smoking a cigarette and quite at peace with the world. He would cheerfully kill that one of his charges who sought to escape, but he is open-minded in regard to industry.

"He just got in today," one such sentry told me, nodding at a particular contented Bulgarian who was actively killing time. "He came in from the front, thirty-five kilometers away."

The prisoner explained that he had deserted, hidden his rifle, and started out to give himself up. The whole countryside is crawling with Bulgarian prisoners, so that no one paid the least attention to him. He walked on and walked on, examining gang after gang, until he found one in which the dignity of labor was respected.

His only complaint was that after he had properly surrendered he was obliged to walk three kilometers farther, until he found an officer at Vertekopp who would receipt for him properly. He thought this formality might have been attended to by mail.

PEASANTS ARE SOURLY PHILOSOPHIC

Along with the prisoners one also finds press gangs of the peasants of the vicinity. They are heartily discontented, although they are paid for their work. One cannot wonder at their attitude. Throughout the centuries there have been wars in Macedonia, and with each war the overlordship of the peasant changed. But a little while ago he owned allegiance to the Turk. Then the Greeks took Macedonia and began to tax him. Then the Bulgars established themselves, and right on the retreating heels of his new masters came the Serbs, accompanied by a swarm of strange men wearing many uniforms and speaking in many tongues. The peasant takes refuge from his confusion in a sour philosophy.

"One year the crops fail," he says, "and the next year there is war. It is all one to the poor man."

Along the Monastir road there is a continuous, dribbling stream of refugees—not many at a time. Sometimes half a dozen will trudge by in the course of a day. Sometimes an entire village has been evacuated farther up the line, and the fifty or so who have held on to the bitter end tramp stolidly and unwillingly to safety. These poor folk never leave their homes until they have been compelled to. The outer world is a strange and hostile place to them. Perhaps not one in an hundred has ever been twenty miles away from his hamlet.

WOMEN RETURN AT NIGHT TO THEIR ABANDONED HOMES

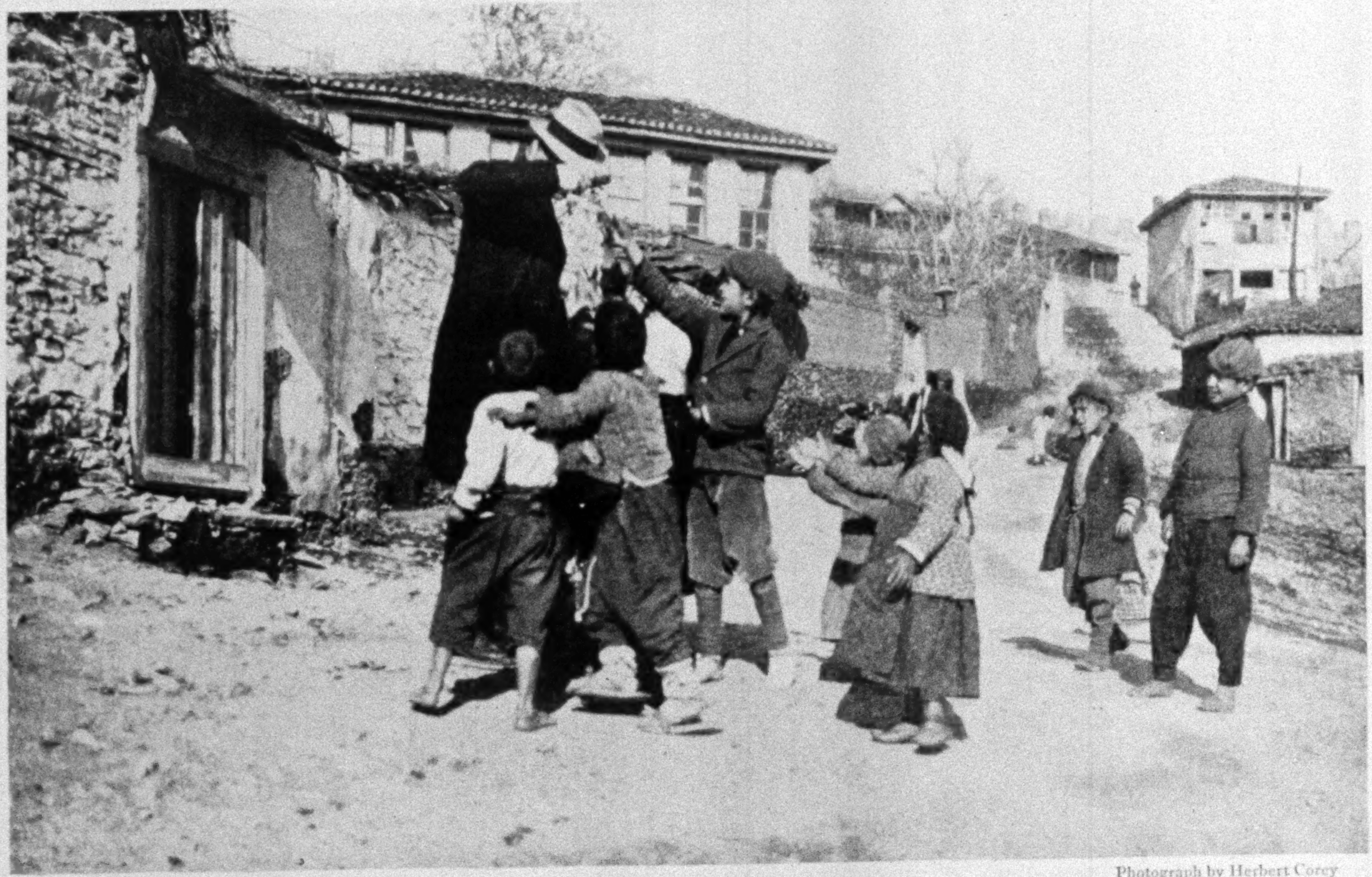
They pile their poor effects on donkeys, put the babies on top, and load the women with what there is left. If there is a spare donkey, the man of the house always rides. If there are two spare donkeys, the eldest sons ride. The women always walk. Only once did I see a man walking while his wife rode the donkey. The road buzzed with the gossip of it.

They have suffered greatly, these poor folk. Yet candor compels me to say that at first sight the difference between a Macedonian peasant evicted and a Macedonian peasant at home is so slight that it fails to arouse much sympathy. These poor folk seem to a westerner always on the edge of starvation. The principal item of their diet is maize, so poorly ground by crude water-turned wheels that their bodies are repulsively swollen from the resultant indigestion.

A man with a yoke of oxen and forty sheep is rich.

Their homes are mere inclosures of stone, topped with a blackened thatch, without windows and sometimes without other door than a blanket or a bit of flapping skin. Often the fire is lighted in the middle of the dirt floor and the smoke seeps out through the crevices of the walls and the holes in the roof. Baths seem unknown and vermin are a commonplace of their existence.

Yet they cling blindly to these hovels. When they hide themselves from an in-



Photograph by Herbert Corey

BAKSHEESH IN ABUNDANCE IN SALONIKI

There is no difficulty in getting good pictures of the kiddies in Macedonia. A penny buys one of them more happiness than a pound could bring to an over-indulged western child, so they are always wanting pennies. When the unbeliever passes their way, their accepted form of salutation is "Penny, Johnny?" and none of them is too bashful to salute.

Photograph by Herbert Corey

REFUGEE TENTS JUST OUTSIDE THE OLD CITY WALL AT SALONIKI

vader they always choose some nook in the hills from which they may watch their black roofs. They cache foodstuffs in secret places, from which they take a handful of corn or a cheese of ewe milk at night.

When they are driven out the men go silently. Sometimes they are sullen. Sometimes they smile at the soldiers in a sort of twisted, sidewise fashion, in a poor attempt at propitiation. The women follow at their heels patiently. After the first outcry against the order of eviction they never openly defy the soldiery. Yet it is the women who most flagrantly disobey.

They return at night to the abandoned homestead, taking their children with them. To do so they must evade the guards and tramp across a desolate country in the darkness, in continual danger from the prowling dogs or from the rifles of the sentries. Somehow they manage to do it. Humanity requires that these little villages in the war zone be emptied to the last human, for in the rear is food and shelter, while at the front is only starvation and danger.

Yet little by little the inhabitants trickle back. At first they are unobtrusive. Although fifty may be living in a hamlet, one sees no more than four or five at a time. Eventually they resume their former mode of life, so far as that is possible. Sometimes they live on the hidden stores of food. Sometimes it is quite impossible to discover how they live at all.

Some such thing happened at Brod.

Photograph by Herbert Corey

CHARACTERISTIC COSTUMES IN THE SALONIKI STREETS

This is a fair-sized town for the northern Macedonian country. There are perhaps 150 houses scattered on the slopes of a rocky hill or sunk in the abominable mud of the Cerna Valley. Here the Bulgarians behaved "fairly well," the peasants said. Some of the men were beaten, and some were taken away to dig trenches, and some ran away to the hills; but the town was not burned and the women were not abused. The peasants were grateful.

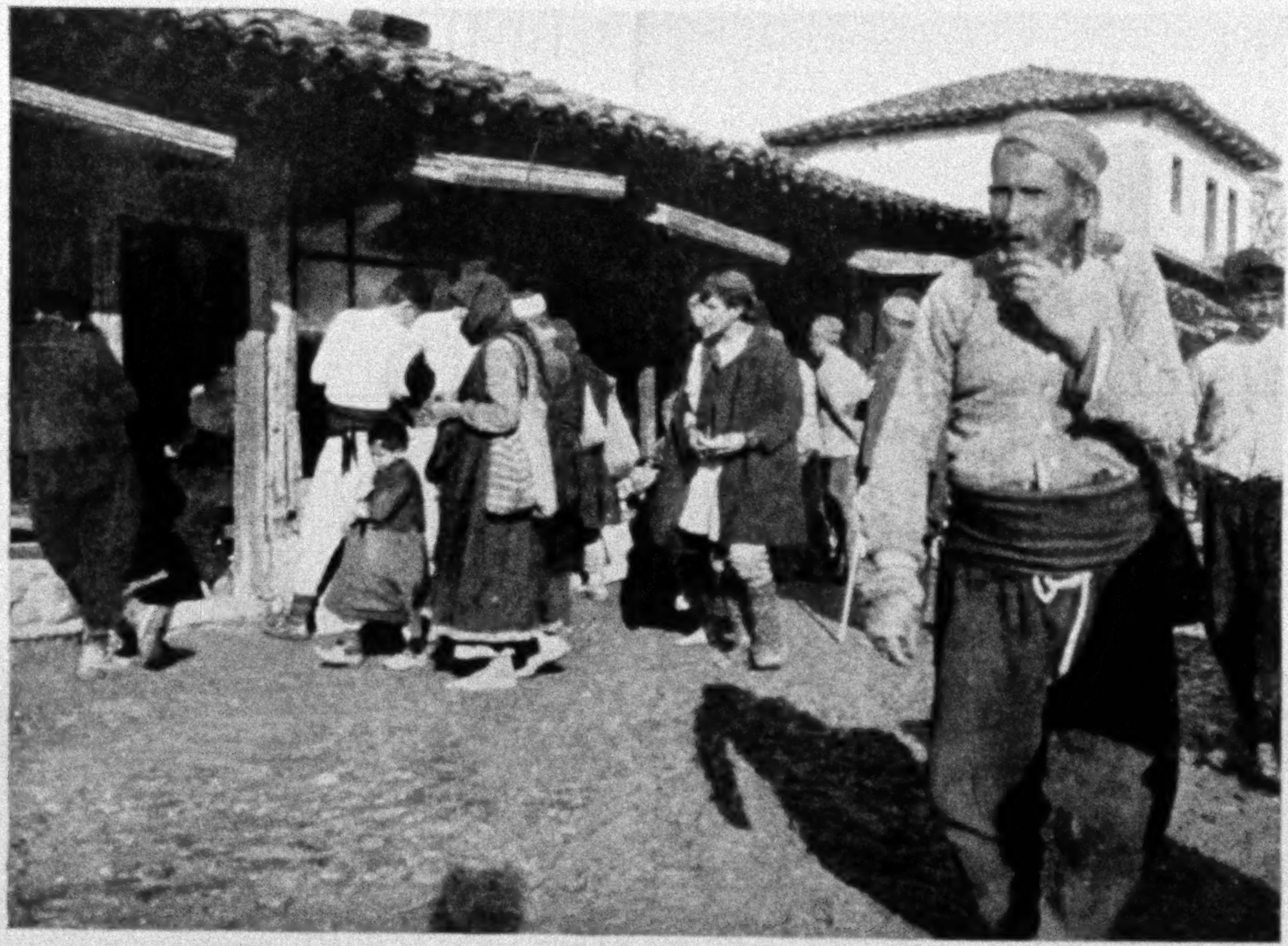
AMERICAN NURSE FED THE STARVING AT BROD

When the Serbians took the town they found several hundred of the people still there. There was no food. The village was under constant bombardment. Each Macedonian peasant is a potential spy, for lineage and allegiance are too mixed for either side to place reliance in his loyalty. The people of Brod were moved out to the last man and baby. The Serbs searched the houses one by one, and looked under the caving bank of the Cerna and hunted over the bare hillside. There was none left. The village headman swore it.

Yet a little later, when the Serbs had given place to the Italians, the mired and filthy streets of Brod suddenly became alive with children. Children were everywhere; starving children, impossibly dirty children, children that were verminous and pallid and so ragged that the snow struck against bare flesh through the holes in their garments. No men and few women were seen at this time. The Italian soldiers fed these little outcasts with the scraps of their rations. A military ration is scientifically adjusted to the needs of the soldier. There is no excess to be devoted to charity.

Miss Emily Simmonds, of the American Red Cross, relieved this situation. Miss Simmonds secured an assignment as nurse in a near-by hospital and while there learned of the children's famine at Brod. She moved in one night without a pass, without a guard, and equipped only with a small tent that was so imperfect a shelter that the constant rains rotted the mattress of her bed. She took a census of the starving ones.

By this time there were 40 women and 200 children, and there was not a bite to eat, nor a stick of fuel nor a blanket.



Photograph by Herbert Corey

A TYPICAL MARKET-DAY CROWD AT SOUBOTSKO

They lived in that defiance of natural law which seems the rule of the destitute in the Balkans. Most of the time they were starving. They slept in heaps, like animals, in order to keep from freezing.

"Send food," Miss Simmonds telegraphed, "especially beans."

PEASANT WOMEN TRIED TO CHURN CONDENSED MILK

The beans came, but nothing else. There was no salt, no meat, no anything but beans. Boiled beans become singularly unpalatable after one has lived a few days on bean *au naturel*. Yet the nurse and the refugees were thankful for beans that week. They were kept from starvation. Later on other supplies arrived. The poor women, faithful to that domestic instinct implanted in every woman's breast, made a pathetic attempt to resume housekeeping along familiar lines. But soon they came to the nurse indignant and complaining. The delegates placed before her bowls of the prepared condensed milk she had issued:

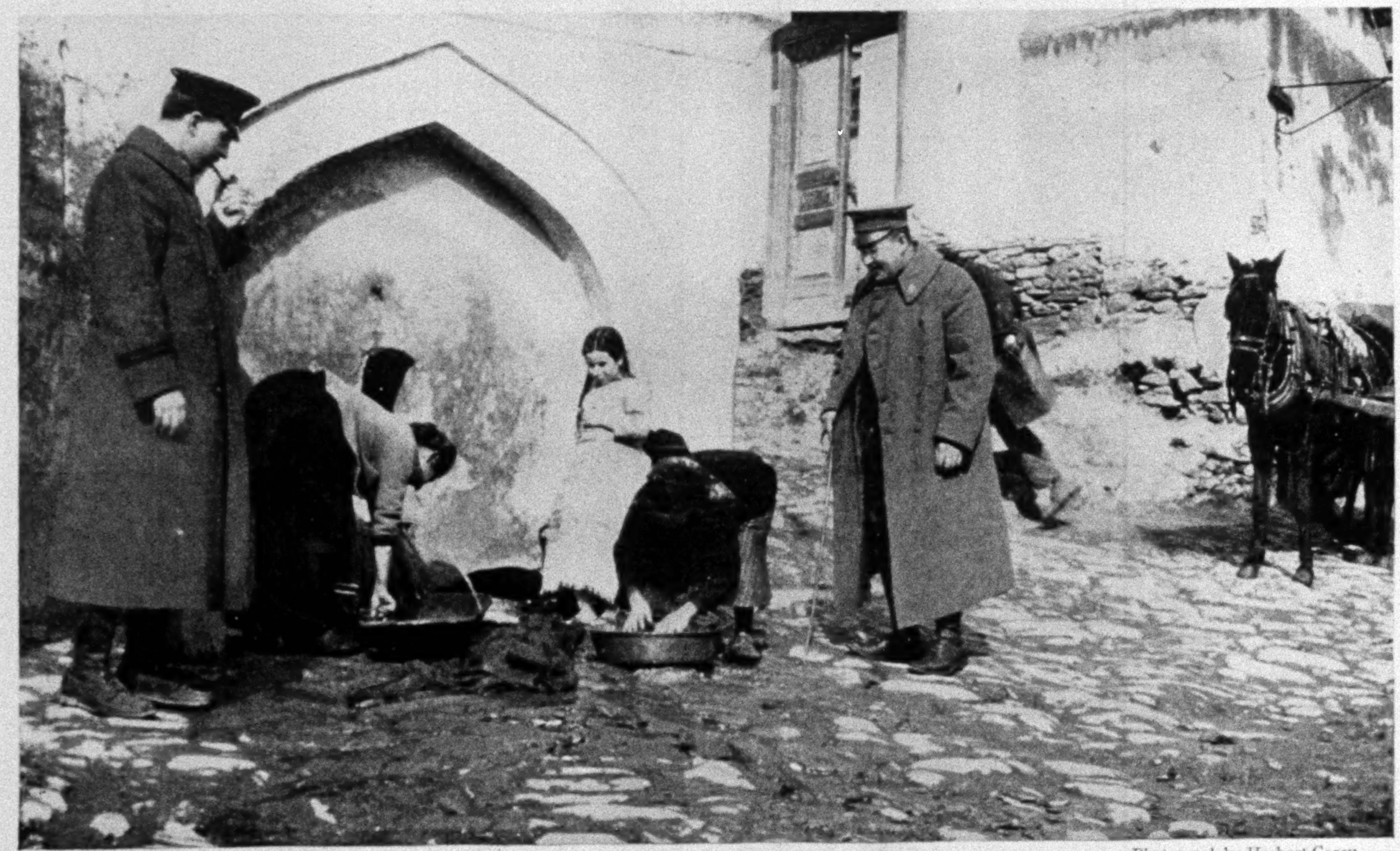
"A devil has entered it," they said with conviction. "For hours upon hours we have churned it and yet the butter will not come."

It was at Slivitska that I began to suspect that these poor devils have a sense of humor. I had gone to the townlet with a Serbian officer who was inquiring into the recent behavior of the Bulgarians. We held court in a cow stable during a pouring rain.

Outside a German prisoner wandered, asking an unintelligible question. He had lost his wits completely during the battle. He fumbled about aimlessly. Sometimes he stood opposite the open door of our cow stable, the tears on his cheeks mingling with the rain. Wounded men lay on the sopping straw.

A dozen or so compact, sturdy, cheerful little French soldiers dried their clothing at the fire which smoked on the dirt floor. A notably sullen priest stood by. A peasant told the village story.

"The Bulgarians were unkind to our father here," said he, indicating the pope. "Also they were cruel to us." The pope sneered ostentatiously. I have never seen



Photograph by Herbert Corey

AMERICAN RED CROSS MEN STANDING BY AN OLD TURKISH FOUNTAIN IN SALONIKI

Photograph by Herbert Corey

THREE GENERALS STANDING BY THE SIGNAL POST, AROUND WHICH AËRIAL OBSERVERS WERE WONT TO CIRCLE AND DROP THEIR MESSAGES

At the extreme left is General Jerome, of the French army; in the center is Voivode Mischitch, the Serbian strategist of the Macedonian campaign, and at the right is General Sicard, of the French army.

a pope who seemed on such bad terms with his parishioners. He half turned to go away. Then he turned back, as though to listen to the story.

"The Bulgarians said they would hang our pope at noon if we did not give them 200 dinars," said the peasant, impressively. It seemed to me that he did not meet the eye of the pope.

"What did you do?" asked the Serbian officer who was conducting the examination. The peasant explained that they were poor folk at Slivitska. They did not have 200 dinars. Furthermore, most of the people of Slivitska had hidden in the hills when the Bulgarians came.

"So the only thing we could do for our father," said the peasant, suavely, "was to ask the Bulgarians to postpone the event until 4 o'clock. That would give our people time to come in from the hills and see our father hanged."

Macedonian mud coupled with the Monastir road is a formidable opponent of the Allied forces here. The Monastir road, in spite of its centuries of use, is of an incredible badness. It has no bottom in wet weather. In dry weather it is but a dust-bin, so that one can trace the course of a moving column for miles by the pillar-like cloud that rises.

MAKING A BAD ROAD BEHAVE

The Allies have done what they could to make the road behave itself. But the Saloniki base is at an average distance of 100 miles from the front line, and those goods which cannot be carried upon the two single-track railroads must go by the Monastir road. The railroads are generally in an acute state of congestion.

At all times the native ox-cart is the last line of transportation defense. In bad weather the railroad bridges wash out. The little De Cauville railroads that net the hills go completely to pieces after each downpour. Their tiny tracks slip

Photograph by Herbert Corey

MISS EMILY SIMMONDS, ONE OF THE MOST NOTED NURSES OF THE AMERICAN RED CROSS, LUNCHING WITH THE TWO "CHEECHAS" WHO HAD BEEN ASSIGNED TO HER FOR A PERSONAL GUARD AT BROD

sidewise on the slopes or the soft dirt ballasting oozes out from beneath the ties.

On the big road the great motor lorries slip and strain and beat the surface into huge ruts. When a car is stranded it is pushed into the ditch by the side. The men attached to it paddle about barefooted, hopelessly, doing little things they know will do no good. They must wait for the road to come to its senses. The pack-trains abandon the road completely and strike across the open country.

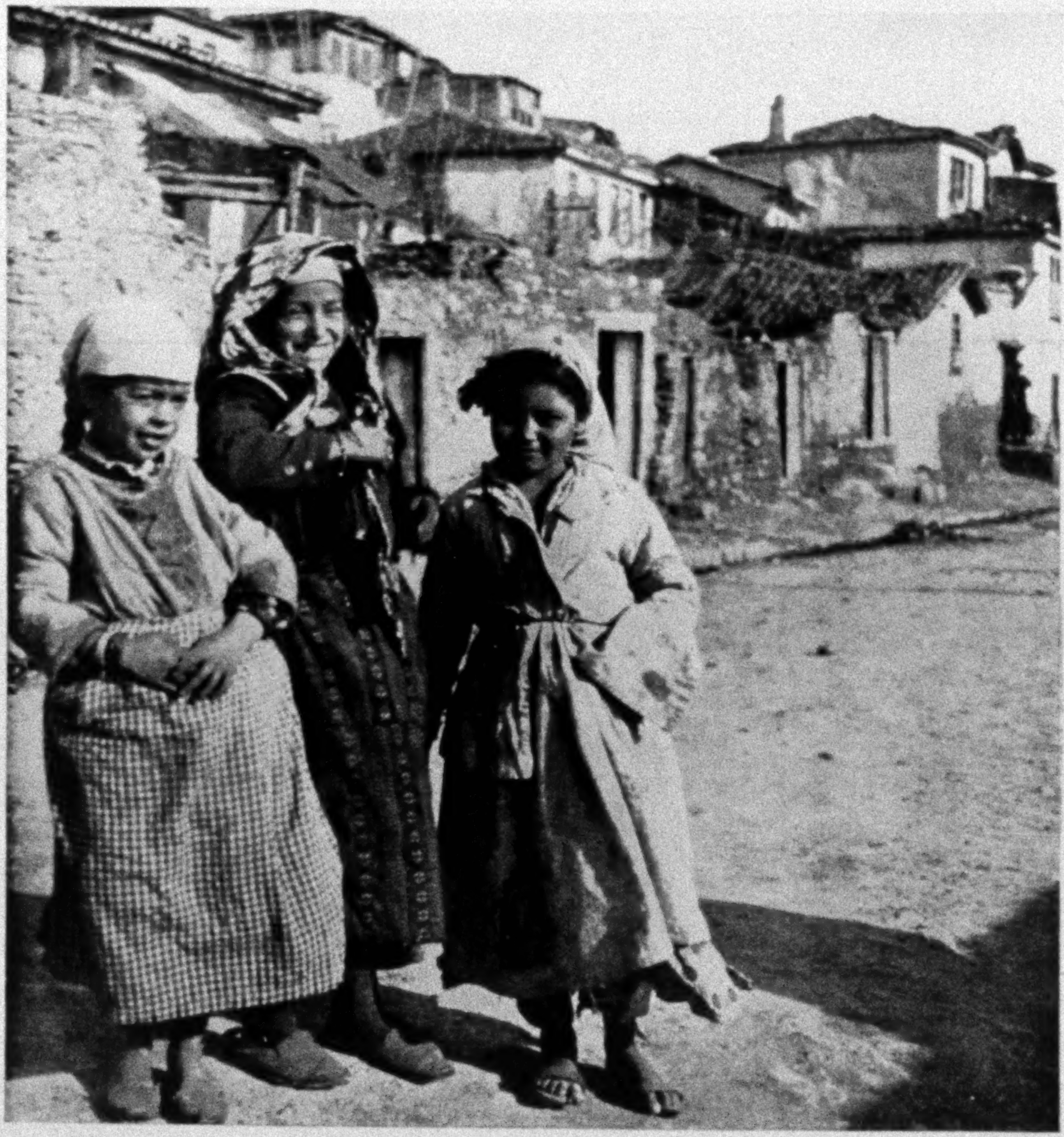
OX-CARTS THE FINAL RELIANCE OF TRANSPORT DEPARTMENT

But the ox-carts groan and creak and waggle on. The little oxen sway and grunt under the goad. Progress is infinitely slow, but there is progress. In the end they reach the place appointed.

The Allied forces have built 2,000 miles of main and branch roads in Macedonia during the occupancy and dry weather conditions are slightly improved. But the loose Macedonian soil and the sandy Macedonian rock is not good road metal. When the Allies leave Macedonia and the people come back to these poor villages that are scattered through the hills, the big road will go back to that state in which Alexander put it, perhaps, or Darius found it. Until it is bettered and the roads that lead from it are made sound for traffic, there can be no permanent improvement in the internal conditions of northern Macedonia. Where Macedonia is not hilly it is a swamp. During the winter Macedonian hills defy nature and become swamps.

If the road is an irritation as well as a necessity, the malaria-bearing mosquito is a really dangerous enemy. Last year the Allied troops did not realize what the Macedonian mosquito can do, apparently. They were not prepared. In consequence fully one-half of their strength was out of action because of malaria.

During one period more men were invalided home than arrived on ships. I heard of battalions with 75 per cent of their men on their backs, and of companies in which only five men were fit for duty. The well men watched the trench while the invalids groaned in their dugouts, but the sick men responded to call when an attack was made. Even in the midst of winter one saw yellow-faced men faltering along the Monastir road toward



Photograph by Herbert Corey

THE THREE GRACES OF SALONIKI

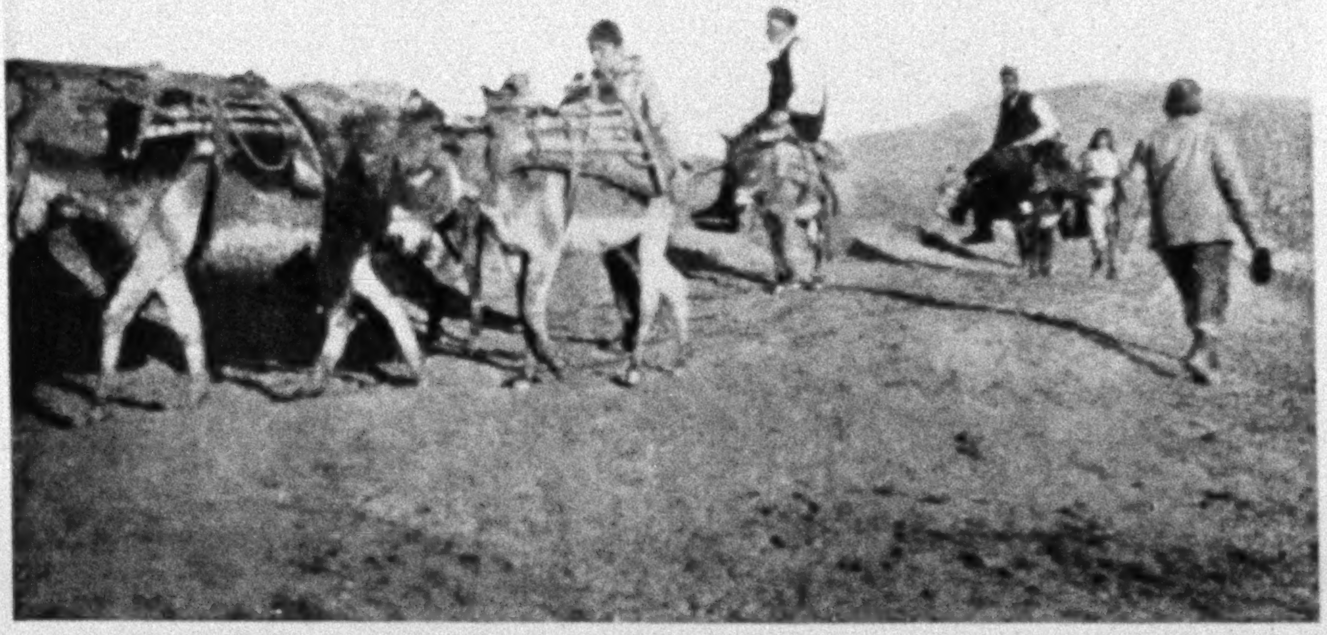
Persistent beggars, but so adorably sunny that they were forgiven and enriched

some near-by hospital. It often took them a day to cover five miles. At night they sometimes slept in the mud, wrapped in blankets that had been soaked by the day's rain. They did not complain. What was the use?

MALARIA-BEARING MOSQUITO IS THE MOST DANGEROUS ENEMY

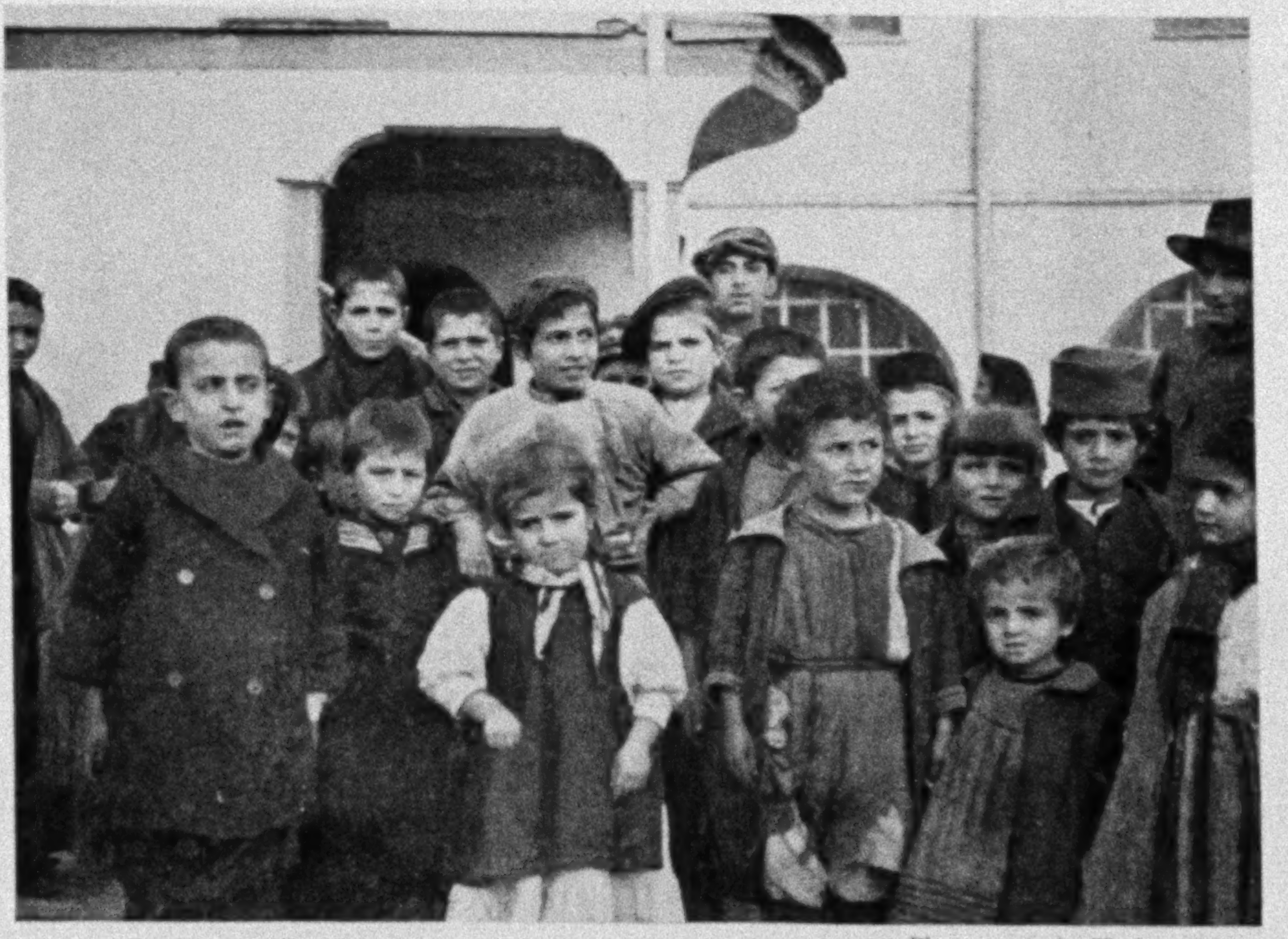
Conditions have improved for future campaigns. The Allies are on higher ground, for one thing. They have cut their way through the Bulgarian lines until they have reached the hills. There will be malaria, of course. There will always be malaria here until Macedonia is drained and oiled, Panama fashion. But the doctors are learning how to treat it and the equipment of prevention has become almost formidable. Men now wear mosquito gloves and masks and neck covers, and sleep in nets inside tents that have been made mosquito-safe.

The difficulty is to make the men make use of these safeguards. They become irritable during the Macedonian heats, in which their strength is fairly drained from them. They tear off the head cov-



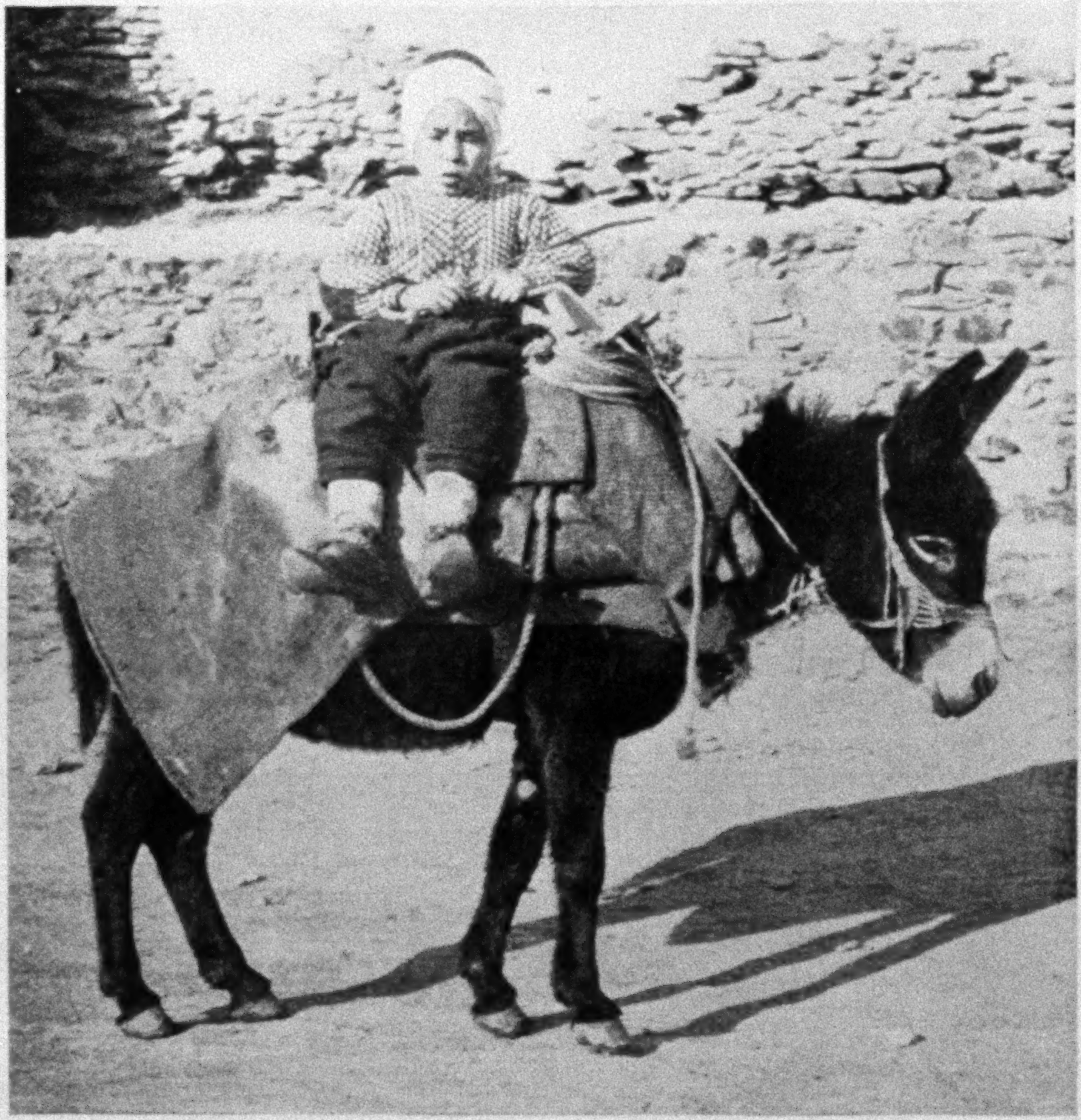
PEASANTS ON THE ROAD TO SAFETY

In this case their exodus had been so hurried that they had not even time to load their donkeys



Photographs by Herbert Corey

GROUP OF REFUGEE CHILDREN IN MONASTIR, SHOWING THE VARIETY OF TYPES OBSERVABLE IN THE CITY



Photograph by Herbert Corey

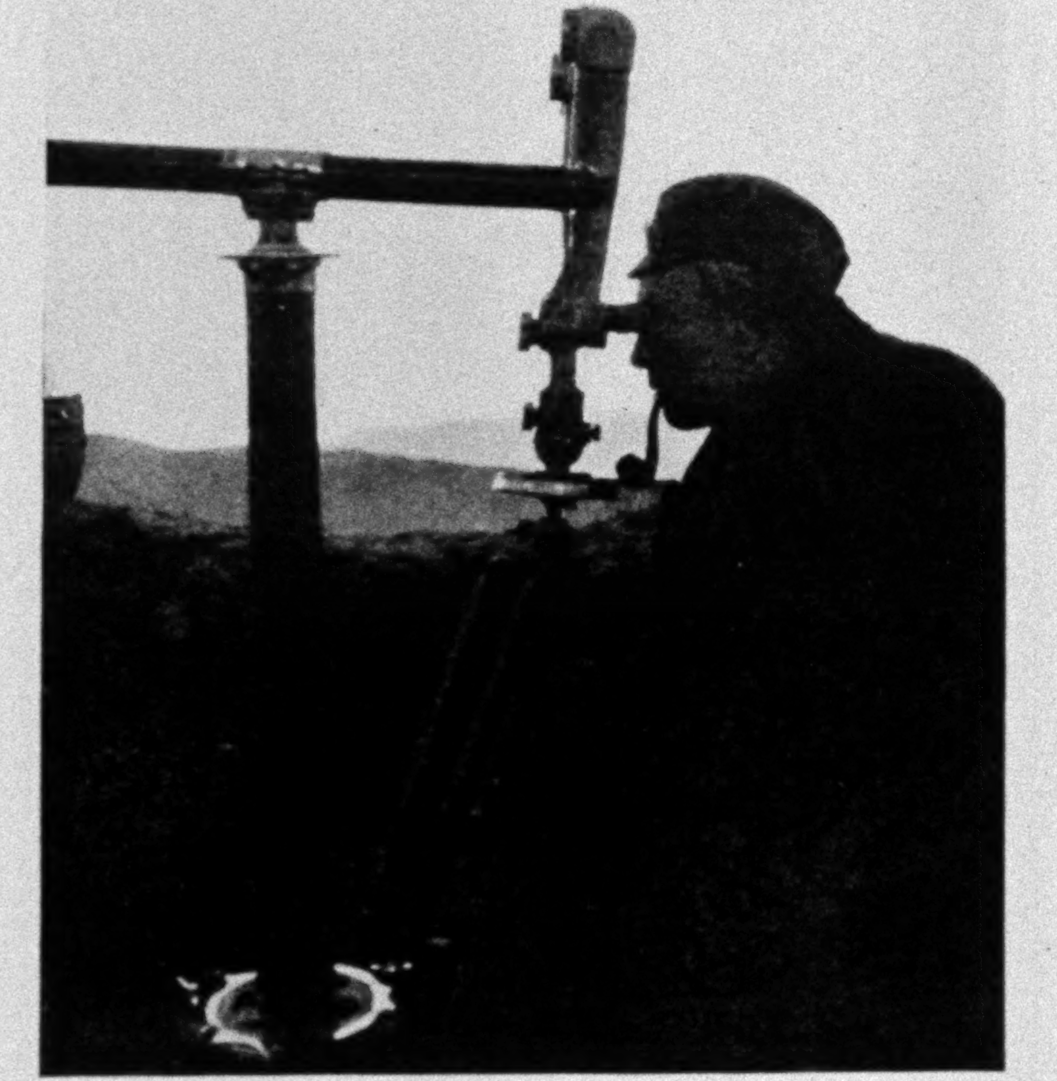
A GRAVE AND COURTEOUS LITTLE GENTLEMAN

Although his home had been burned behind him and the other members of his family had disappeared

ers to get a breath of air and draw the gloves from hands that have been bleached and thinned by the flow of perspiration. Then the mosquito does his perfect work.

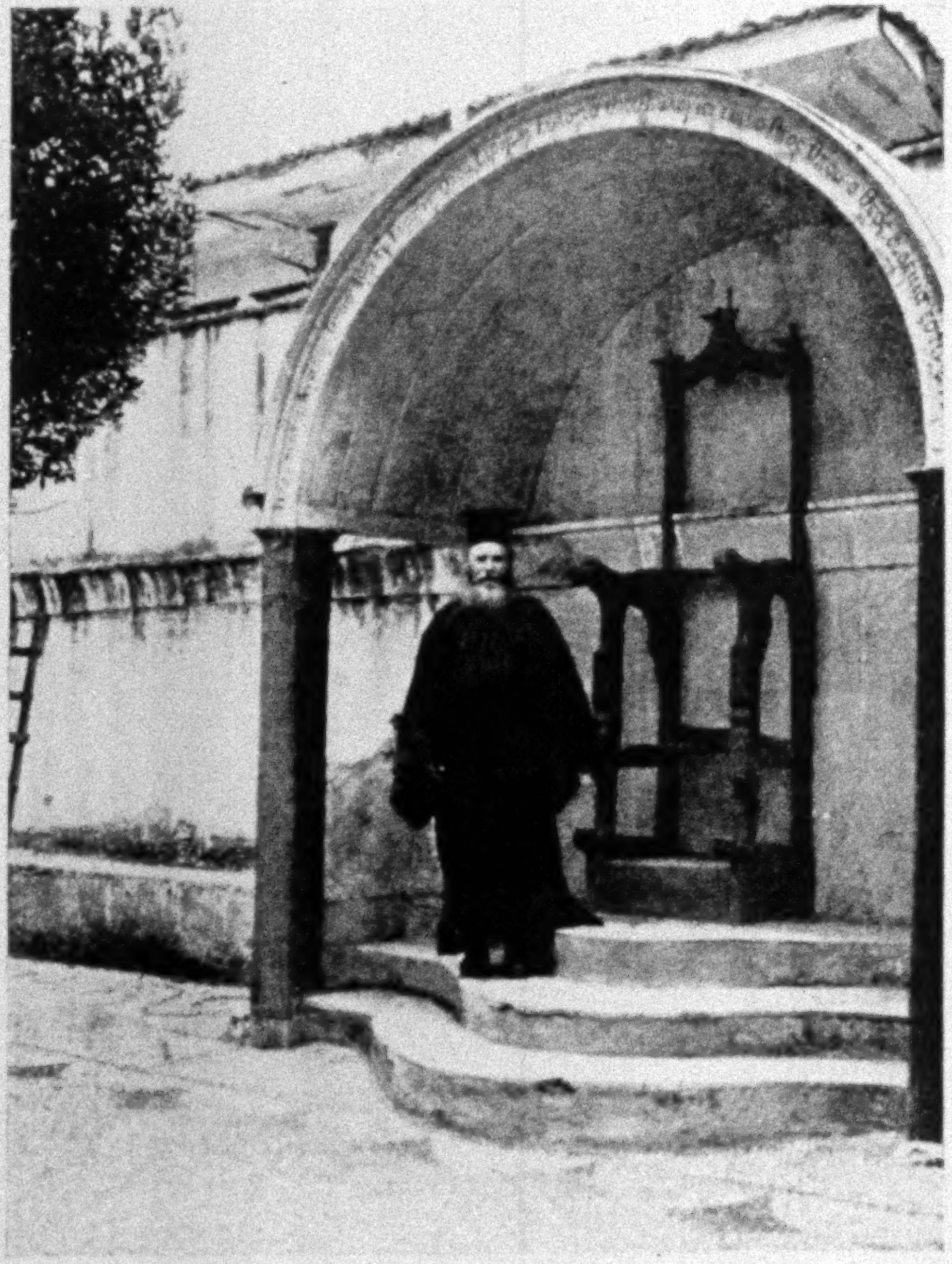
Today the road ends at Monastir. True, a branch wanders north to Nish and Uskub and Prilip, and another branch crosses the hills to the Adriatic Sea. But across these branches the Bulgarian line is thrown. Monastir is a town of 40,000 people, pretty clean by eastern standards, well built, with wide streets and a tinkling river running through its handsome boulevard. It was captured by the Allies in November, 1916, but the Bulgarians held the hills from which it is commanded. They shelled it every day until the middle of April, and they may be shelling it now for aught I know.

It was even a contemptuous sort of shelling they gave it. Although they had a sufficiency of big guns, and sometimes dropped a 210 shell in the middle of a promenade to prove it, most of the firing on the town was from the field pieces of 77 caliber. They were so near at hand, you see — only four or five kilometers



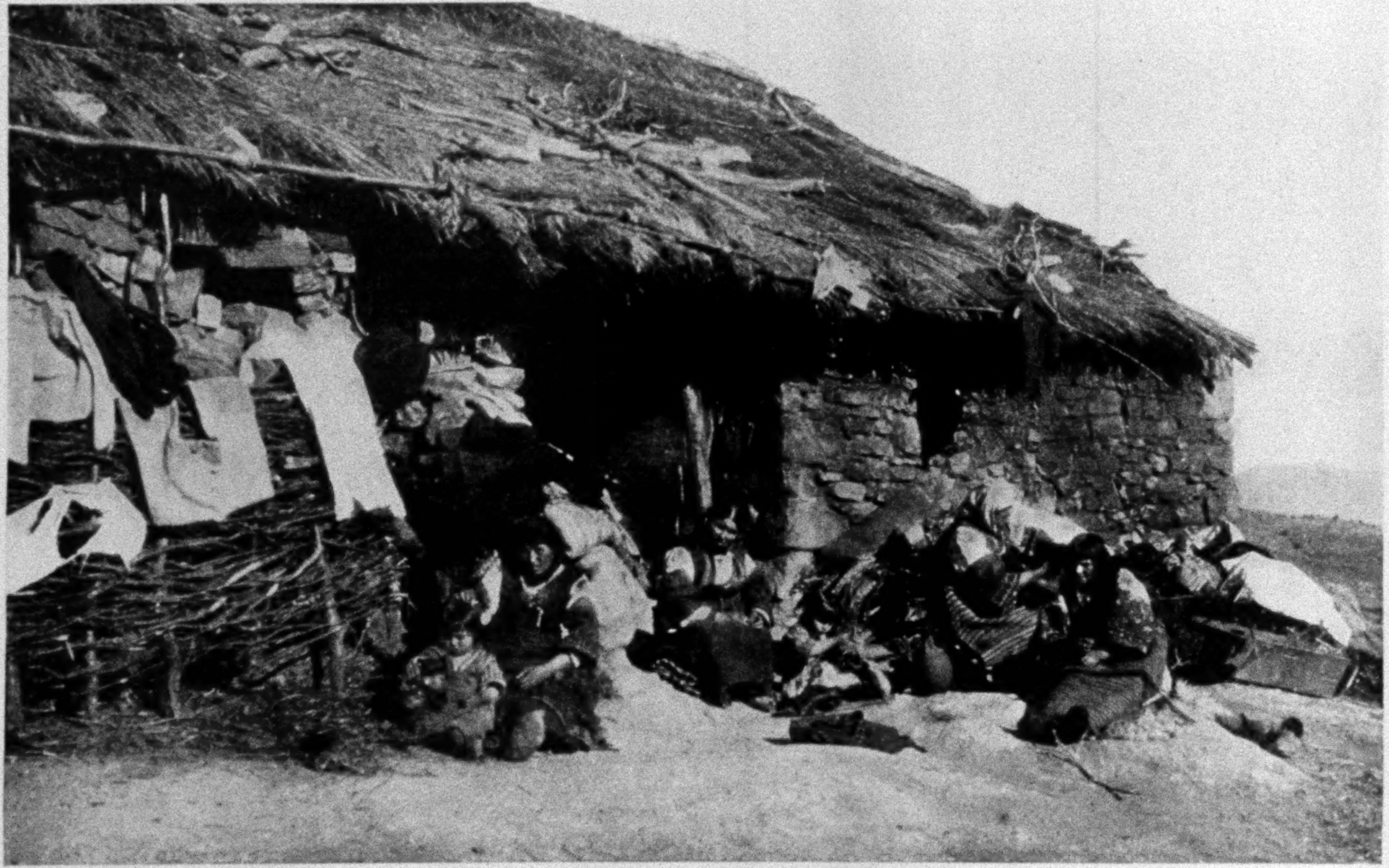
VIEWING THE DISTANT ENEMY THROUGH THE STAFF BINOCULARS ON CHUKE MOUNTAIN

Two hours before this picture was taken the trench had been held by a German unit



Photographs by Herbert Corey

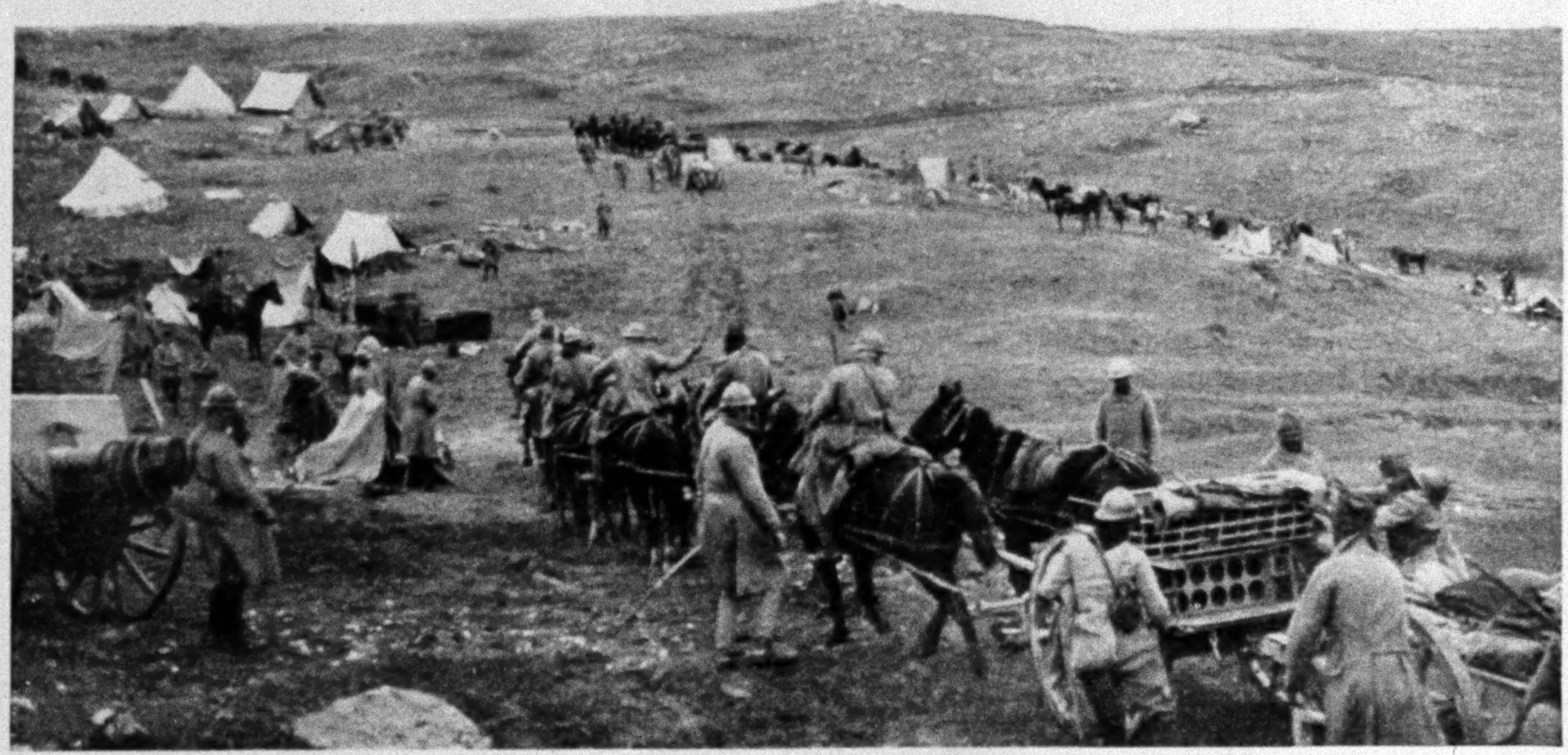
A GREEK "POPE" STANDING BY THE SIDE OF THE ANCIENT CHAIR IN THE OPEN-AIR PULPIT FROM WHICH HE OCCASIONALLY READS HIS SERVICE



Photograph by Herbert Corey

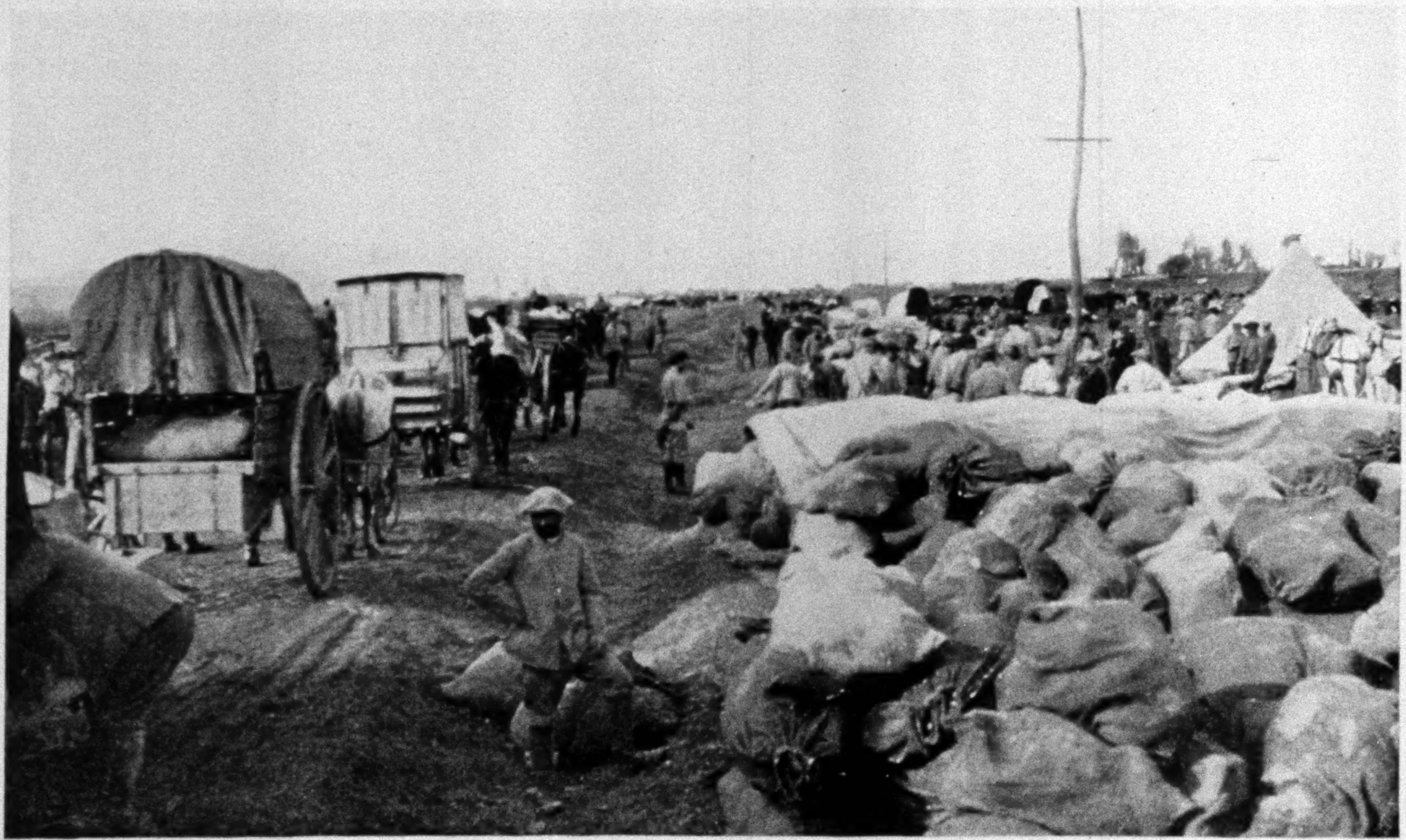
A FAMILY PARTY AT DOBRAVENI

In which the elders gave to the heads of the younger members of the gathering an attention which it is feared they needed



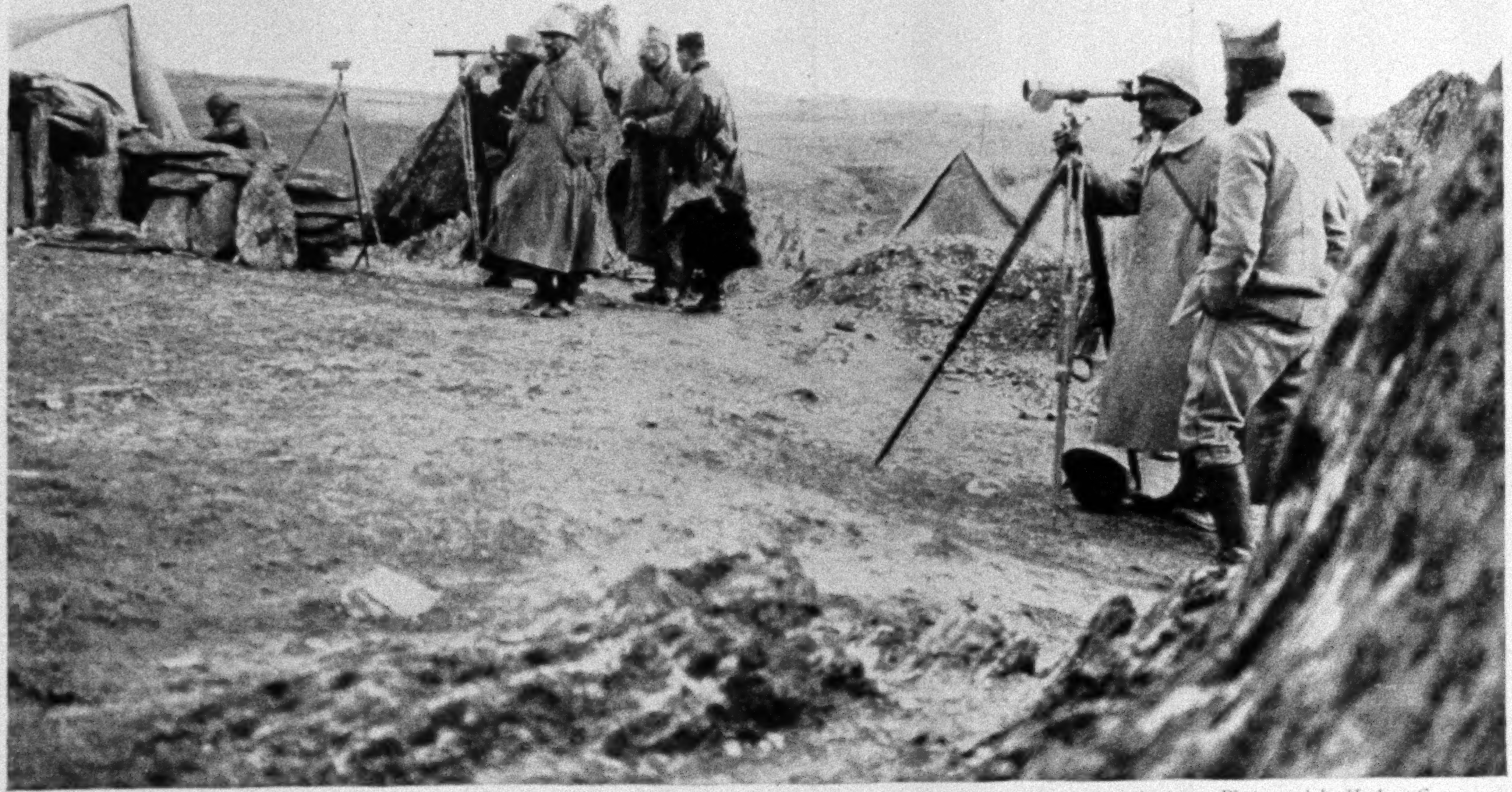
Photograph by Herbert Corey

THE FIRST PULL AT THE GUN WHEN ORDERS WERE GIVEN TO MOVE ON; IN FIVE MINUTES FROM THE TIME THE ORDER WAS RECEIVED THE GUN TEAM HAD BEEN HARNESSED AND THE BATTERY HAD STARTED



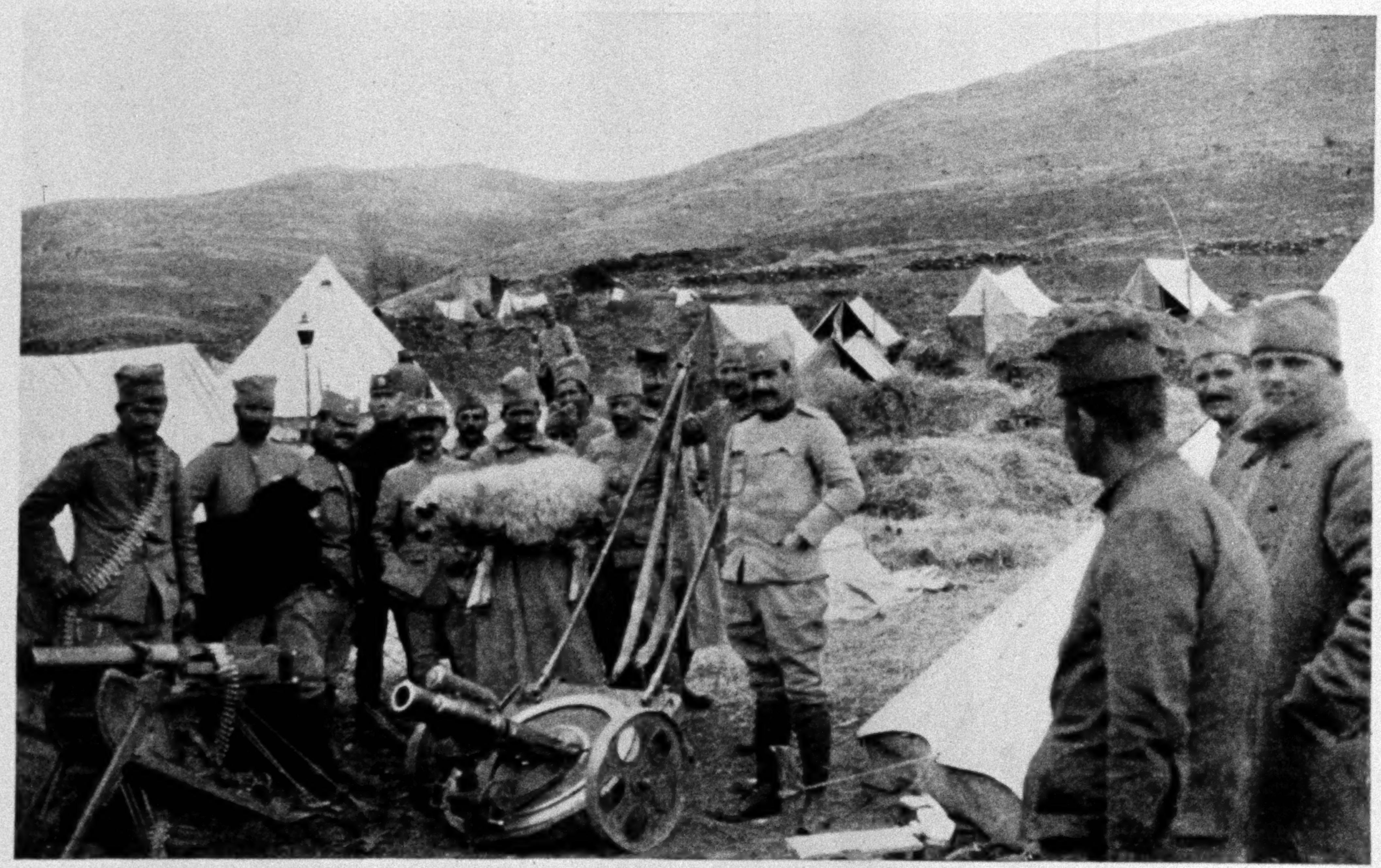
Photograph by Herbert Corey

A FOOD "DUMP" ALONGSIDE THE MONASTIR ROAD, BUT AT A SUFFICIENT DISTANCE FROM MONASTIR TO PRESERVE THE EATABLES FROM THE CONTINUALLY DROPPING SHELLS



Photograph by Herbert Corey

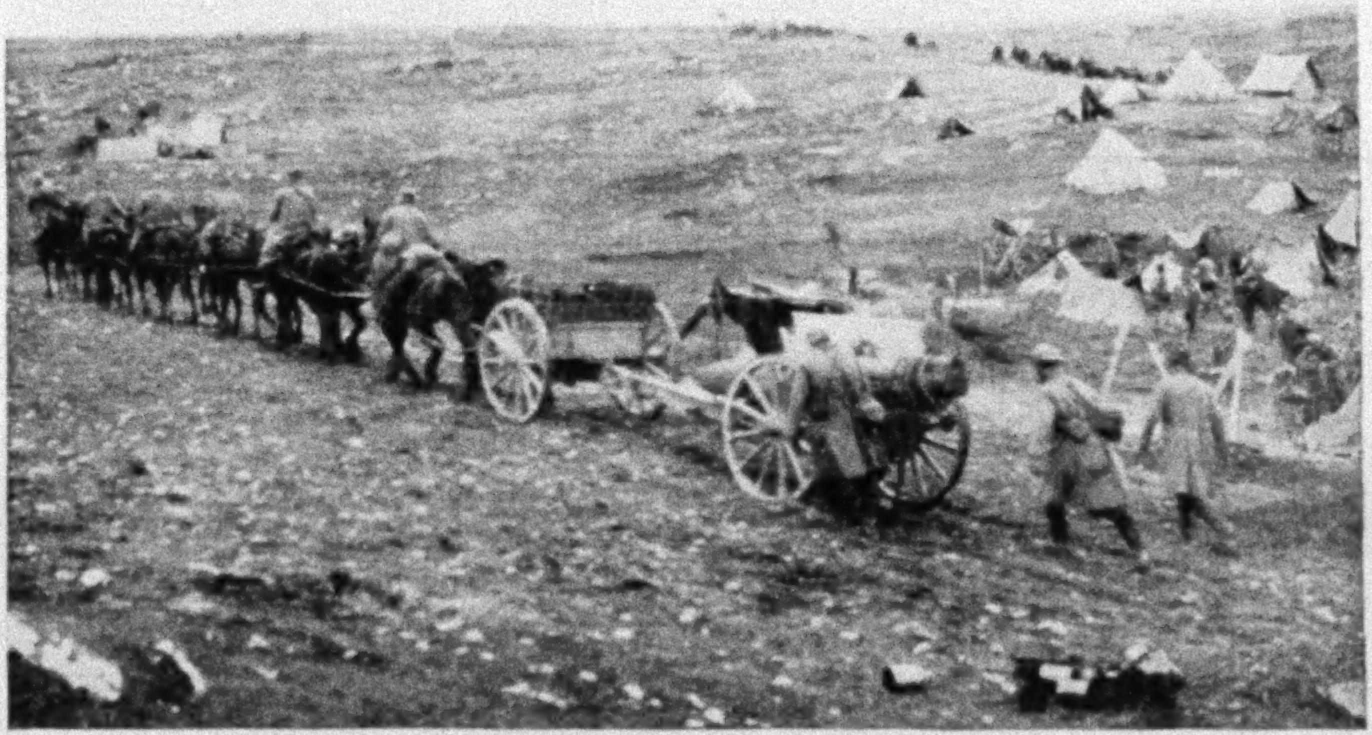
WATCHING THE DISTANT FIGHTING THROUGH THE BINOCULARS ON AN ARTILLERY OBSERVATION POST ON CHUKE MOUNTAIN WHILE THE SERBS WERE TAKING HILL 1212



Photograph by Herbert Corey

A LIGHT MOMENT IN THE CAMP OF THE MORAVA DIVISION OF THE SERBIAN ARMY

The day before a minenwerfer of a pattern new to the Serbs had been taken, and it, with a captured machine-gun, occupies the place of honor. To the left soldiers hold the black and white sheep which are the division's mascots.



Photograph by Herbert Corey

ORDERS HAD JUST BEEN RECEIVED TO MOVE THE BATTERY ON, AS THE BULGARIANS WERE RETREATING

Twelve horses were needed to tear the gun out of the reluctant mud

away. At night the tapping of the mitrailleuse seemed in the very edge of town.

It was too large a town to be hurriedly evacuated. There are few asylums for refugees in this land of ruined villages and minute farms. So that only the very poor—perhaps ten thousand in all—who had no food and no money and no hope, were sent away to Saloniki and elsewhere at the start. The richer ones trembled at home.

One by one they were permitted to leave; but when I saw Monastir for the last time, in January, fully one-half of its population were still hiding in the cellars and hoping that the Bulgarians might be driven on. The streets were empty. The one café that remained open was tenanted only by French soldiers, singing a rousing Gallic chorus; and in the single restaurant the only guests beside myself were the Italian officers. At night there is never a light in the city.

I have never felt so absolutely alone as in wandering through these broad, white, moonlighted streets. When a regiment of tired men shuffled by, their hobnails scraping on the cobbles, I sat down on the curb to watch them. They took the curse of emptiness off the town.

Then an English officer came up and asked the sort of a question one learns to expect from an Englishman and from no other man on earth.

"Where," said he, "can I find a piano? We want to have a sort of a sing-song tonight."

NIAGARA AT THE BATTLE FRONT

By William Joseph Showalter

NIAGARA FALLS, held in reverence for its beauty by generations of nature-loving Americans, has enlisted for the war and is doing its bit in the cause for which the people of the United States have pledged anew their lives, their fortunes, and their sacred honor.

Aided by science, it has transformed the silvery sheen of its whitened waters into the fateful furies of the artillery duel and the infantry charge. The placid flood of the upper river has become hardness in steel, speed in manufacture, healing in antiseptics, whiteness in linen, cheapness in automobiles, durability in machinery.

It has lengthened the lives of big guns; it has multiplied the power and the number of shells; it is standing guard over every mile of war-carrying railroad track, and is protecting every engine axle and car wheel from failure in the rush of material to the front. Aye, who knows but that the very scales of victory will be turned by the weight it throws into the balance?

The story of Niagara's rôle in the battle of the nations is an epic in the history of war.

Twenty-seven years ago certain manufacturers, seeing the tremendous amount of power running to waste where the waters of Superior, Michigan, Huron, and Erie leap from lake level toward sea-level, undertook the installation of a great hydro-electric plant at Niagara. Later other power-developing interests entered the field, and then began a legislative and diplomatic war between those who would utilize some of the power of Niagara and those who would keep it untouched by the unsentimental hand of commercialism.

Finally the governments of the United States and Canada made a treaty regulating the amount of water that could be diverted for power purposes. Canada has used her share to the last second-foot, but the United States has never permitted the utilization of a considerable share of her allowance.

A VAST ELECTRICAL LABORATORY

But for the part used there has been rendered by the users one of the most remarkable accounts of stewardship in the history of commercial progress. The cheap power obtained made Niagara a laboratory where great ideas could be transformed into nation-benefiting enterprises.

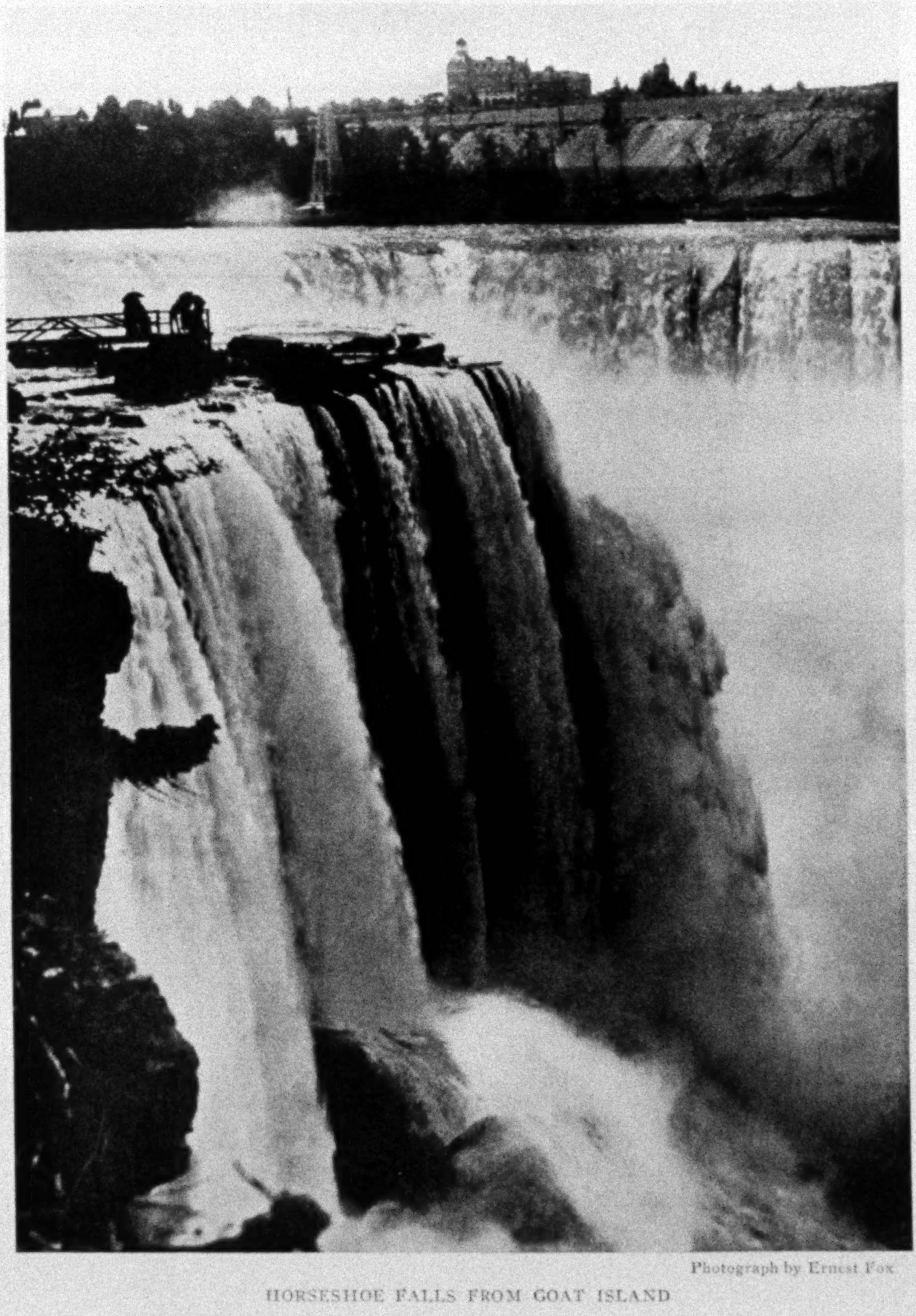
When Niagara power was first developed, efforts to make artificial grinding materials were proving a failure because of a lack of electric current at a price the new venture could afford to pay. Those who backed the process thereupon went to Niagara Falls, set up a plant, and founded the artificial abrasive industry. How much its success means to America cannot be overestimated.

Take the grinding machinery out of the automobile factories, remove it from the munition plants, eliminate it from the locomotive works, car foundries, and machine shops of the country and you would paralyze the nation's whole industrial system. And that would have happened ere now had not Niagara's artificial abrasives stepped in to save the day when the war shut out our natural supply of emery and corundum from Asia Minor.

There is not a bearing in your automobile but is ground on Niagara-made grindstones; crankshafts are roughened and finished with them, pistons and cylinders are made true, camshafts likewise, and a hundred critical parts of every car, whether of the cheapest or the most expensive make. It would be impossible to build anything of tool steel on a commercial basis without Niagara's abrasives.

NIAGARA SHAPES AND HARDENS OUR SHELLS

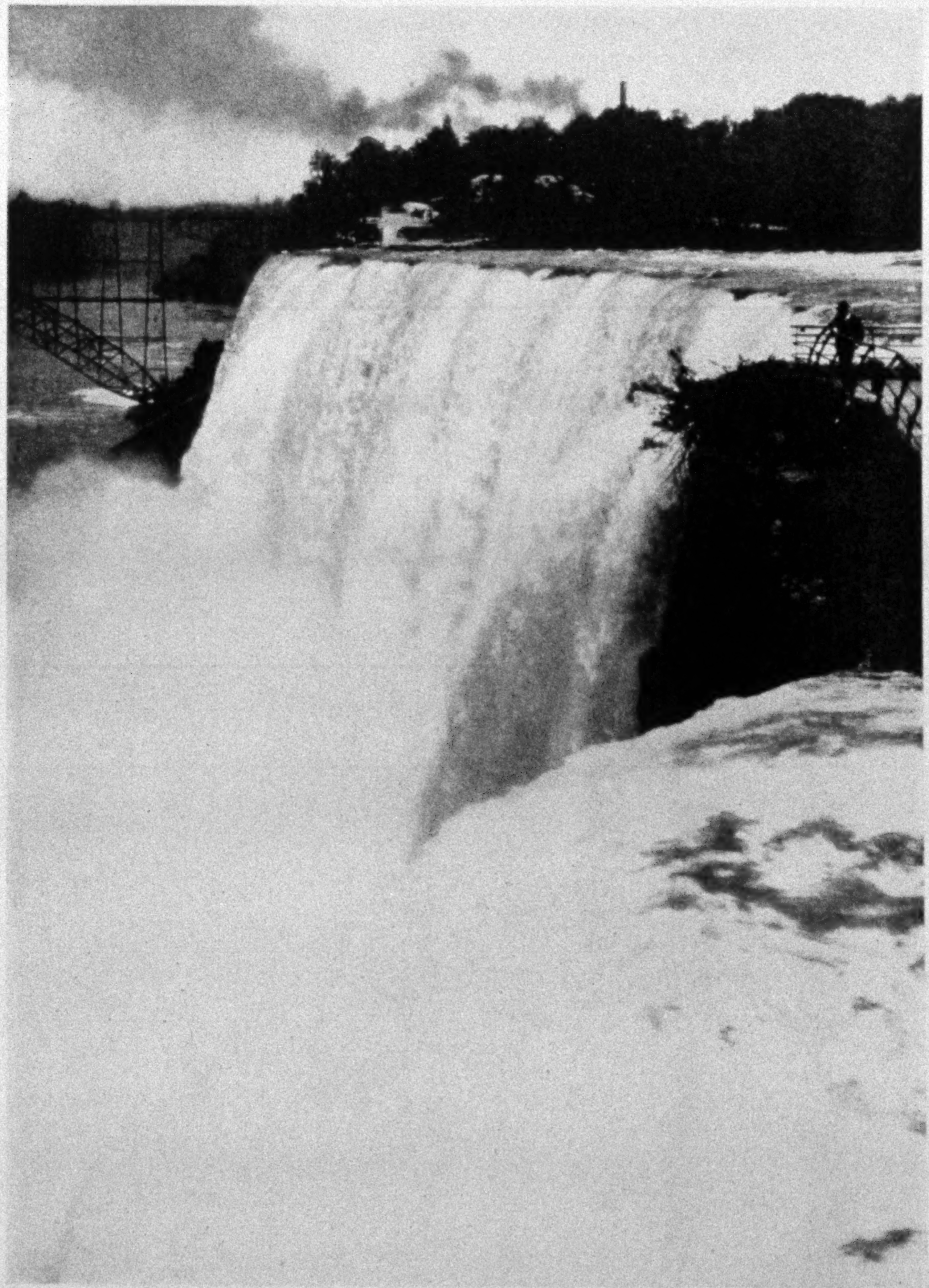
No shell goes to Europe whose nose has not been ground into shape on Niagara-made grindstones. Likewise it is



Photograph by Ernest Fox

HORSESHOE FALLS FROM GOAT ISLAND

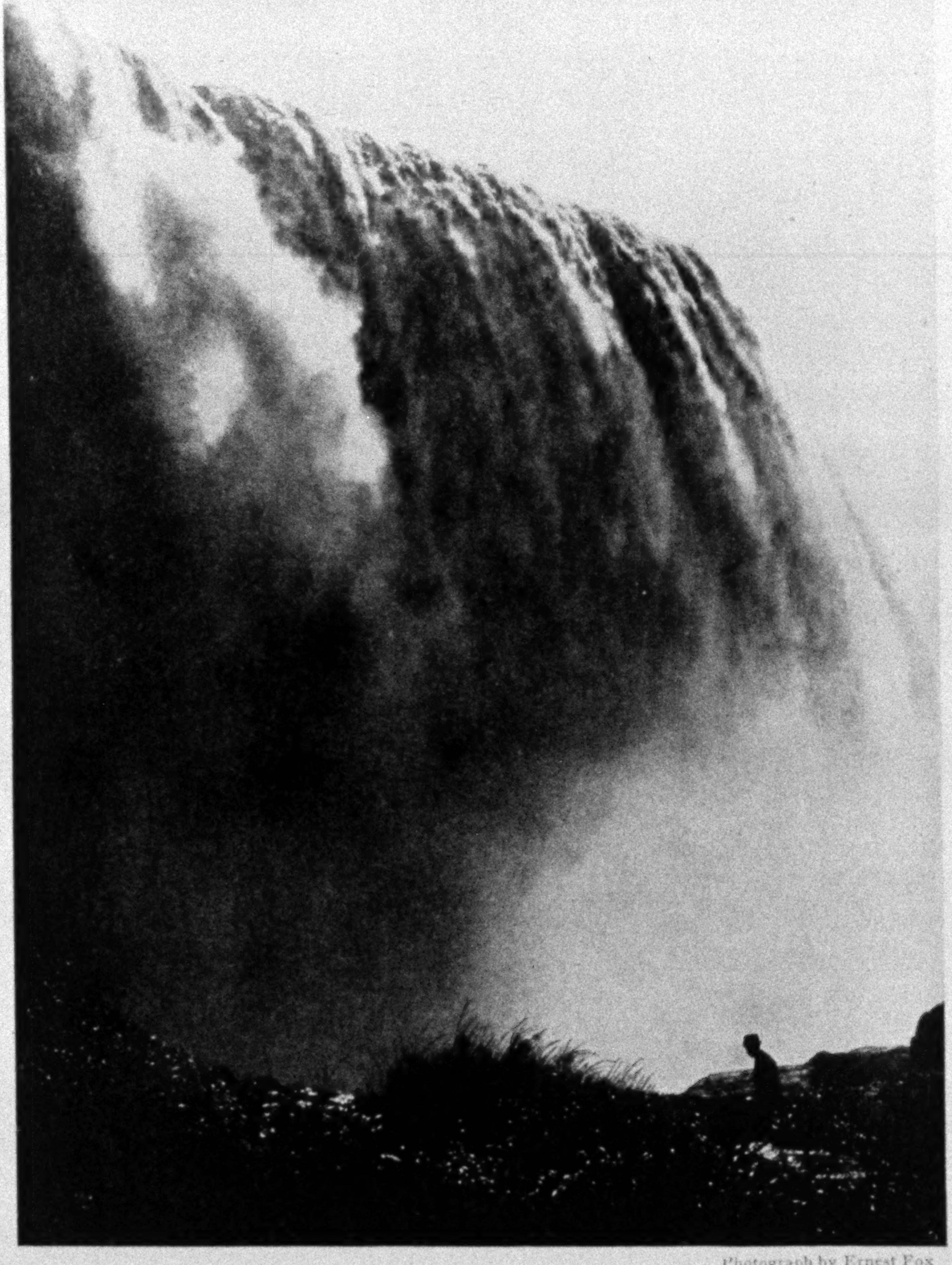
The shimmering softness of the cataract has been transformed by a miracle of industry into a sure rock of defense. From the seemingly insecure wooden causeway shown to the left the spectator commands a wonderful panoramic view of the very heart of Niagara.



Photograph by Ernest Fox

AMERICAN FALLS FROM GOAT ISLAND

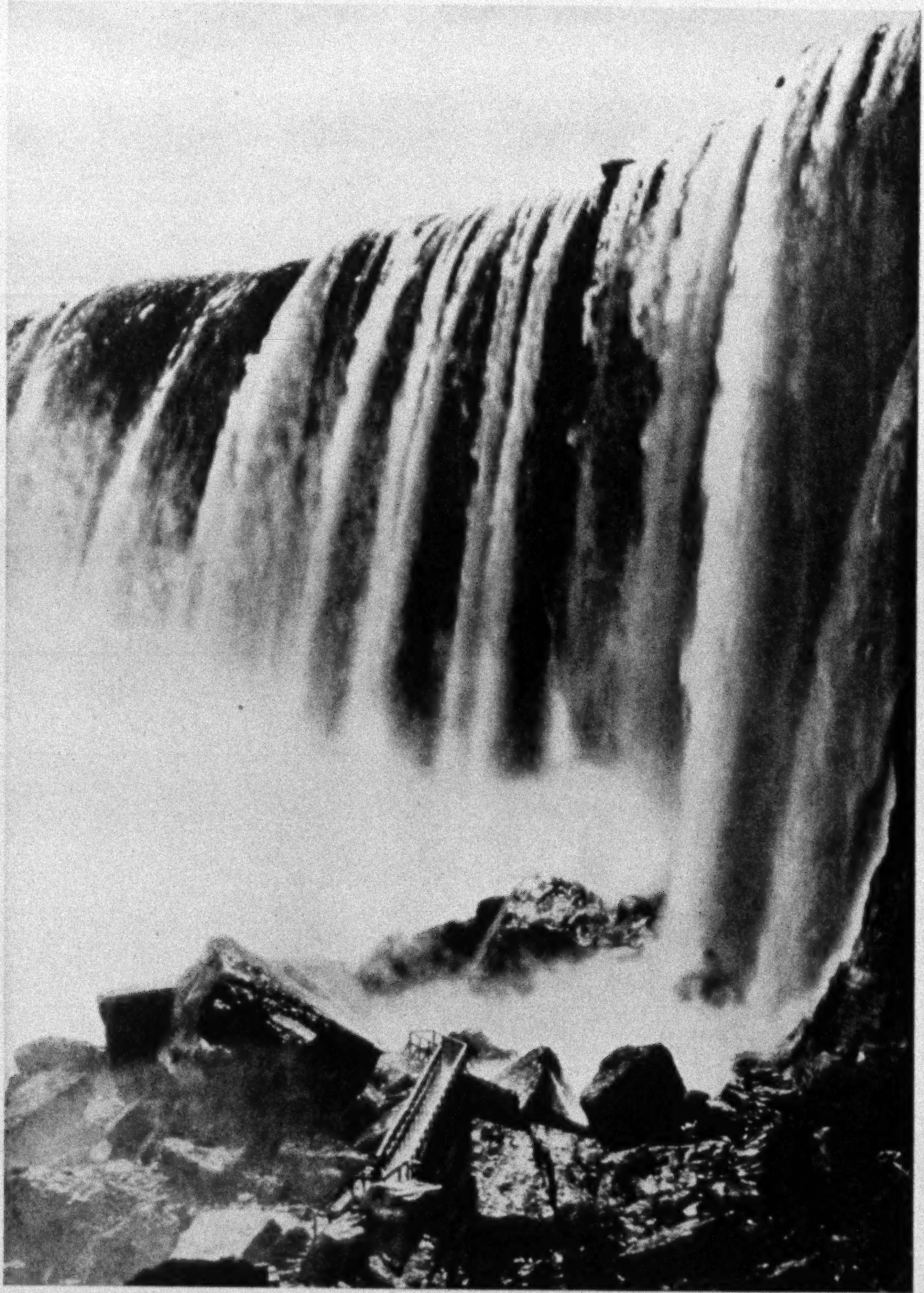
Directed by the magic of man's ingenuity, the resistless energy of these raging waters is transmuted into hardness in steel, speed in manufacture, healing in antiseptics, whiteness in linen, cheapness in automobiles, durability in machinery.



Photograph by Ernest Fox

THE AMERICAN FALLS IN THEIR PLUNGE OF 167 FEET

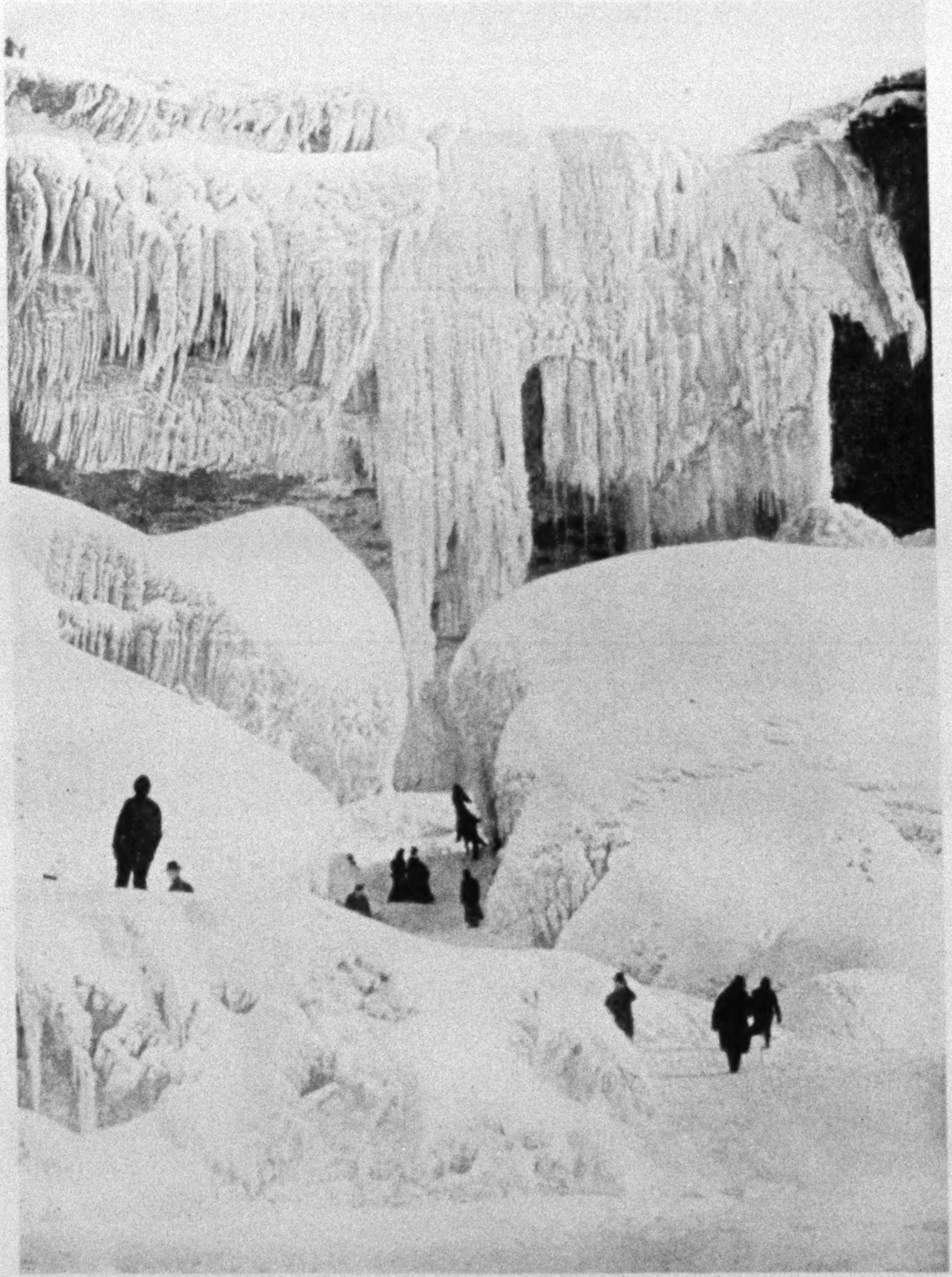
A modern Orpheus, science has lured the mighty waters of Niagara to follow it into the channels of utility, yet without sacrificing the beauty and grandeur of the world's noblest cataract.



Photograph by Ernest Fox

HORSESHOE FALLS FROM THE CANADIAN SIDE

The ceaseless flow and measureless power of Niagara are symbolic of America's purpose and resources, which will be mobilized for service in the cause of humanity on the battlefields of Europe. No hand can stay the nation, no fleets or armies turn it from its goal—the emancipation of mankind from the tyranny of despots.



Photograph by Ernest Fox

NIAGARA'S CAVE OF THE WINDS

The Niagara that mantles itself in ice at the silent touch of the Frost King, in its turn touches sand and coke, and they become near-diamonds; water and salt, and they become purity in drinking water; clay, and it gives forth a marvelous metal; a dead wire, and it lights a city or drives a car; carbon and silica, and they are transformed into lubricants or inks.

Niagara's abrasives that have done more than any one other thing to master the "hot box," that *bête noire* of the American railroad man and the worst enemy of schedule-time train transportation the world around.

While the processes of carborundum manufacture were being perfected another lesson was learned. Quartz, you remember, is the geologist's thermometer, for it is formed between narrow ranges of temperature. If the materials from which Nature makes it are subjected to more than so much heat, they take on an entirely different character from quartz. The same is true if they are subjected to less than a certain amount of heat.

So, also, it is with carborundum. In its manufacture a large quantity of a mixture of coke and sand, with a touch of sawdust and a dash of salt, is put into an electric furnace. A heavy current of electricity is passed through this for 48 hours, heating it to 1,350 degrees centigrade.

If it is properly heated, there forms around the central core of coke a great array of crystals, large and small, almost as hard as diamonds. If too much heat is applied, instead of forming into crystals, the material breaks up into fine particles of black dust and you have graphite.

LEADS FOR PENCILS; ELECTRODES FOR FURNACES

Therefore, largely by the same process, the electric furnace produces from the same materials the near-diamond of the artificial grindstone and the microscopic dust that becomes lead for a pencil, color for ink, base for lubricants, electrodes for furnaces and death chairs, or a thousand other things, under the manipulations of industrial science.

In making carborundum wheels, whetstones, and other grinding implements, the crystals are separated, graded, mixed with various binders, pressed into the shapes desired, dried, and then baked in kilns, like porcelain or other ceramic products. In some cases binders are used which do not permit exposure to heat, as in the case of emery cloth.

Carborundum has a companion, alundum, as an abrasive, each having its more advantageous uses. In the manufacture of the latter certain clays are used. One of these is bauxite. This is first purified and then put into a water-jacketed electric furnace, which fuses the aluminum oxide. The fused material is taken out, crushed, and prepared for use much after the manner of carborundum.

Between the two, Niagara has succeeded in saving American industry from the calamity that would otherwise have ensued as a result of the cutting off of our supply of natural abrasives. For more than two years Niagara's abrasive industry has been mobilized against the Central Powers with an effect that cannot be measured.

GIVING STEEL A GREATER HARDNESS

But Niagara's bit in behalf of American arms does not end with the story of abrasives; indeed, it only well begins. The story of ferro-silicon is another illustration of how beauty under the alchemy of science is transmuted into grim-visaged war.

Last year this country made more steel than the whole world produced when William McKinley became President of the United States. Nearly three-fourths of that steel was made by the open-hearth process, and ferro-silicon was used as a deoxidizer, to purify it by driving out the oxygen. Furthermore, in the making of big steel castings that alloy is practically indispensable in the elimination of blow-holes.

The entire ferro-silicon industry, practically, is centered at Niagara, which thus gives pure steel and sound castings as another part of America's contribution to the cause of Allied victory. Every contract for shell steel that has been made in two years calls for a content of ferro-silicon.

There is another alloy of iron indispensable in war, and well-nigh so in twentieth century peace — ferro-chromium. This is the alloy which gives that peculiar hardness to steel which makes it resistant almost beyond human conception. It has been estimated that a modern 14-inch shell, such as our Navy is ever holding in readiness for the possible dash of a German fleet, has a striking momentum at a distance of eight miles equal to the colliding force of a modern express train running at top speed.

Yet this shell must have a nose so hard and so perfect that, although the entire force of the impact is upon its narrow point when it strikes the armor plate, it will pierce the plate without being deformed itself.

NIAGARA PROTECTS YOUR AUTOMOBILE AXLE

Not only does ferro-chromium go into the shells of American manufacture, giving them hardness and death-dealing qualities which must make the stoutest enemy heart quail, but it gives strength to the tool steel shaft, life to the automobile axle and gear, and serves peace and war alike with equal fidelity. And Niagara produces half of America's supply of ferro-chromium today.

Other alloys indispensable to our success in the great war, in the production of which Niagara is a contributing factor, are tungsten, vanadium, and molybdenum. Some of these alloys are made there, but in the production of the part that is not Niagara contributes the aluminum which makes their preparation possible. Together with chromium, they give us our high-speed steels, gun steels, etc.

America has been able to turn out munitions with a rapidity that has astonished the world and even ourselves, because through Niagara's influence the high-speed tool reached an unprecedented development in days of peace.

In the old days of carbon steel the machine that would cut rapidly would heat the steel so hot as to ruin its temper. Today alloy steel is not even fretted, much less put out of temper, by cutting speeds that would have been fatal to any carbon steel ever produced.

NIAGARA'S GIFT OF ALUMINUM

Where once a cool cutting edge was absolutely indispensable, now even a huge battleship shaft can be turned down, revolving at a speed of 30 feet a minute and giving off shavings more than half an inch thick.

It was the touch of Niagara that transformed aluminum from a laboratory curiosity into one of the most essential of all the minor metals, one with which it would now be difficult to dispense and which has been power to the Allied arm in the European war. Take it out of the automobile industry, and the stream of cars America is sending to the battle front would fall to low-water mark, instead of rising above it.

Then there is silicon metal which keeps transformer steel in electric transmission from ageing, and which, in conjunction with caustic soda, will produce the gas for the army's hydrogen balloons, and titanium—both Niagara products which cannot be overlooked in any summary of Niagara's part in America's war.

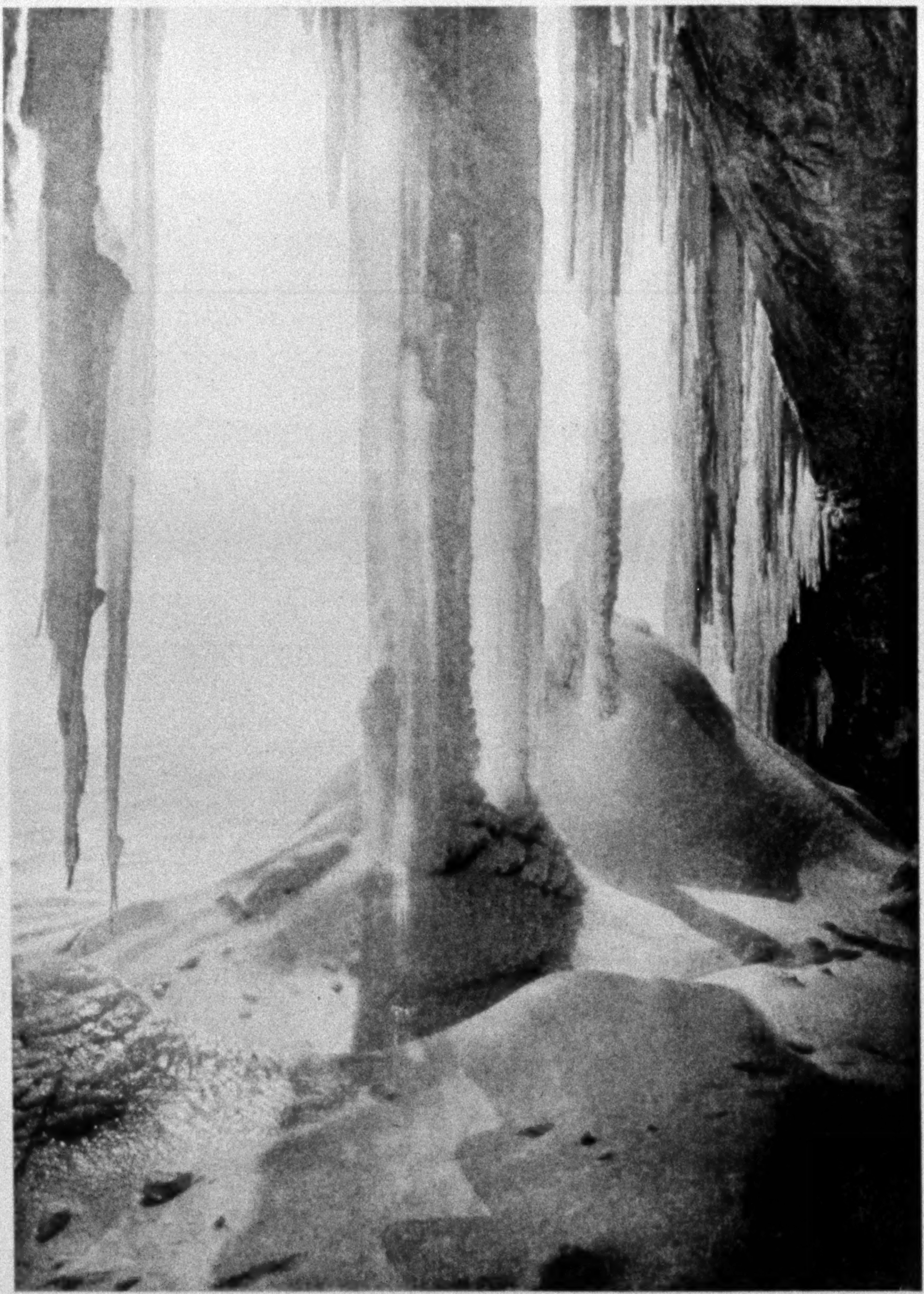
Between Niagara's alloys and her abrasives, it is estimated that every industry utilizing steel has multiplied its productive powers by three. Engineers who know every phase of the processes of automobile manufacture declare that if it had not been for these abrasives and alloys, every motor-car factory in America would have had to slow down to one-fifth of its normal production when the war broke out.

PREPAREDNESS AGAINST THE DYNAMITE PLOTTER

Calcium carbide is another product of the electric furnace which Niagara is giving to the nation in vast quantities. One furnace uses egg-size lime and chestnut coke in the proportions of 3 parts lime and 2 parts coke and is able to produce as much calcium carbide in a day as the original furnace could produce in a year. This compound is the only commercial source of acetylene, whose many uses are well known.

In every big industrial plant in the country there is fear of the spy, and every oxy-acetylene blow-pipe in the neighborhood is registered, so that in the event of a wrecked plant the work of rescue and restoration can begin at once.

When the *Eastland* went down in Chicago harbor it was the cutting power of the oxy-acetylene flame that liberated the imprisoned people. Calcium carbide is also the material from which calcium



Photograph by Ernest Fox

ICICLES UNDER THE HORSESHOE FALLS: NIAGARA

When Nature desires an altar dedicated to her own glory she seeks Niagara in winter and there creates gigantic monoliths of ice and snow, carves them with her chisels of wind and water, quickens them with color snatched from a sunbeam, and lo! her worshipers come to gaze in silent adoration in the aisled and vaulted temple of her matchless handiwork.

cynamid, essential in the fixation of nitrogen, is obtained.

But Niagara does not stop with these things. In the trenches of Europe there must be pure water lest epidemic disease sweep over them, destroying more than the shells, shrapnel, and machine-guns of the enemy; and Niagara comes forward with chlorine, or an allied product, which kills the germs of disease, yet leaves the drinker untouched.

In the simplest form, the process of breaking up salt and getting command of the qualities of the two elements in it consists of dissolving about one part of common salt in eight parts of water and passing a given current of electricity through it. The resultant fluid is a great bleacher and disinfectant. A gallon of it will kill all the germs in a day's drinking water of a city like Washington. Of course, the processes of manufacturing chlorine, bleaching powder, and other compounds is more complex.

A thousand American cities sterilize their water with these products, which have done more than any other agency in the hands of the sanitariums to wipe out water-borne epidemics. In the hospitals of France and England they form the active part of mixtures used to sterilize the wounds of the soldiers. Without them there would be no book or letter paper; cotton dresses and sheets would be no longer white; our every-day chemical fire extinguisher would disappear.

One might go on showing how Niagara aids America in her preparedness campaign. Its laboratories are producing the materials from which picric acid and other powerful explosives are made. They also are producing metallic soda from which is manufactured sodium cyanide, used alike in extracting gold and silver and in electro-plating.

All these things Niagara has been able to do without detracting at all from its beauty — even without exhausting the amount of water authorized by the Canadian-American treaty.

HELP OUR RED CROSS

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THE RED CROSS needs at this time more than it ever needed before the comprehending support of the American people and all the facilities which could be placed at its disposal to perform its duties adequately and efficiently.

I believe that the American people perhaps hardly yet realize the sacrifices and sufferings that are before them.

We thought the scale of our Civil War was unprecedented, but in comparison with the struggle into which we have now entered the Civil War seems almost insignificant in its proportions, and in its expenditure of treasure and of blood. And, therefore, it is a matter of the greatest importance that we should at the outset see to it that the American Red Cross is equipped and prepared for the things that lie before it.

It will be our instrument to do the work of alleviation and of mercy which will attend this struggle.

WOODROW WILSON.

OUR ARMIES OF MERCY

By Henry P. Davison

Chairman of the War Council of the American Red Cross

Probably every member of the National Geographic Society, if not already in service, has at least one near relative or dear friend preparing cheerfully and unselfishly for the battle lines on sea and land. Those who cannot go are searching for means to help their loved ones and our beloved country. In order to assist, in their patriotic ambition to be of service, those who must stay at home, the National Geographic Magazine, *by courtesy of the American Red Cross, publishes herewith the principal addresses at one of the most awakening meetings that has ever assembled in America—that of the American Red Cross War Council, held in Washington on May 24 and 25.*

The meeting had been called by the President of the United States to plan means for raising immediately an immense Red Cross war fund. Every one who reads the addresses by General Pershing, Henry P. Davison, Ian Malcolm, John H. Gade, Herbert C. Hoover, Frederick Walcott, Secretary Baker, Eliot Wadsworth, and ex-President Taft will appreciate the imperative necessities of our Department of Mercy.

The members of the National Geographic Society are urged to coöperate with the Red Cross through their local Red Cross chapters, but, for the convenience of the many thousands of members living in remote places, where there is no Red Cross chapter, remittances may be made to the Red Cross fund through the National Geographic Society, using the blank form printed on another page.

Gilbert H. Grosvenor, *Director and Editor.*

THE most stupendous and appealing call in the history of the world to aid suffering humanity confronts our Red Cross. Millions of men who have been fighting for liberty lie dead or wounded; millions of women and children are homeless and helpless; hundreds of towns and villages have been destroyed; disease and distress are rampant.

Up to now our own people have not suffered. While Europe has been pouring out her life-blood, America has experienced a prosperity she had never known before.

But now we ourselves are in this gigantic war. We now see that the struggle against autocracy and tyranny which our Allies have been making is and from the first has been in reality no less our struggle than theirs. We ourselves must now share the suffering which they have endured; we, too, must bear the burdens and we must do our part in a very real way.

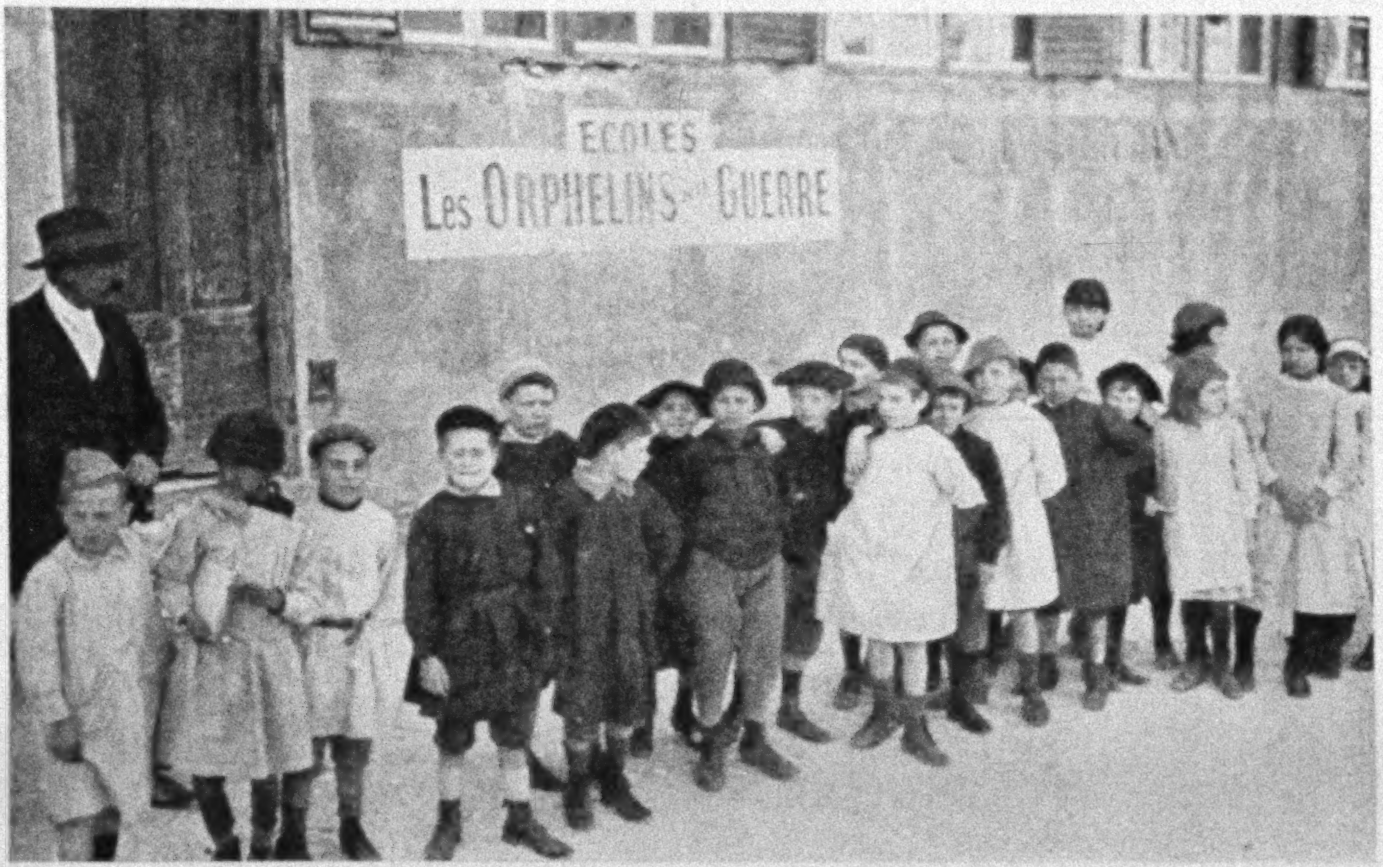
NEEDS BEYOND COMPUTATION

Our Red Cross is a vital factor in the struggle. To promote efficiency in administering its great responsibilities, the President of the United States has created a Red Cross War Council. We of the Council know now only what the minimum requirements are; but we know already that the needs which our Red Cross alone can supply are at present beyond computation.

Something of what we must expect to do and something of the sacrifices which we must expect to make will be indicated by the following summary of the very present situation:

Hundreds of American doctors and nurses are already at the front. A force of 12,000 American engineers will soon be rebuilding the railroads of France. Upwards of 25,000 American men are now on the battlefields of Europe, fighting as volunteers in the Allied armies; soon 25,000 American regulars will be added to their number.

All our National Guard is to be mobilized, our regular army is to be recruited to full strength, and 500,000 other men are shortly to be called to the colors. Within a few months we should and will have in service an army of 1,000,000 and a navy of 150,000 men.



Photograph from Harriet Chalmers Adams

PUPILS AT A FRENCH SCHOOL FOR WAR ORPHANS

In the midst of her battle for national existence, France is doing her utmost to provide an education for the children of her dead patriots. It is a difficult task, however, to feed and clothe as well as give instruction to the fatherless thousands.

These men must have our best. To prepare against their needs in advance will be a stupendous task which the Red Cross must undertake.

Doctors, nurses, ambulances, must be made ready. Vast quantities of hospital stores—linen, bandages, and supplies of every kind—must be prepared and at once. If we wait, it may be too late.

OUR DUTY TO OUR FLAG'S DEFENDERS

When we ask our own sons and brothers to fight for our liberty 3,000 miles from home, in a country already sore and afflicted, surely we cannot do less than prepare to take care of them in their day of suffering.

Gallant Canada from 8,000,000 population raised an army of 450,000 men. Eighty thousand are dead or injured, and Canada has raised in value $16,000,000 for the Red Cross to relieve her sick and wounded. Her Red Cross, thus vitalized by the sacrifice of those at home, has been able to save thousands from death and misery.

Immediately our soldiers go into camp their dependent families will become a problem. Obviously, in a country the size of our own, the proper and practical way to distribute both the burdens and the benefits fairly and uniformly will be through the government itself. This is especially fitting when voluntary contributions must meet such enormous requirements in other fields.

There will undoubtedly arise a large number of special cases requiring additional or unusual assistance. Such assistance should be made systematic largely through local chapters of the Red Cross.

When our men go to France we must not only prepare to take care of them when sick and wounded; another very serious problem will confront them and will confront us in our care and forethought on their behalf.

Englishmen and Frenchmen, when from time to time they are relieved from their grim duties in the trenches, go home. The soldiers from other countries on the firing line cannot go home; there is no home to go to! They go to Paris. Many of them do not return from Paris as efficient soldiers as they were when they went there.

THE HOSPITAL FOR CONSUMPTIVE SOLDIERS: BLIGNY, FRANCE

Not all the casualties sustained in the trenches are inflicted by the bullets of the enemy; tuberculosis finds many victims among those not inured to the hardships of trench life. France has been quick to recognize the necessity for giving instruction to her invalid soldiers, in order that they may, by practicing the lessons of hygiene, be restored to health and to their homes.

Our American soldiers must have a home in France—somewhere to rest, somewhere to find a friendly atmosphere, somewhere to go for recreation and wholesome amusement.

These men will be returning to this country some day. We want to make it certain that as many as possible return in health and strength, and not afflicted with disease from which our forethought might have protected them.

The Red Cross must—and it alone can—become a real foster parent of our soldiers while they are in Europe. To perform that function well will require a large sum of money.

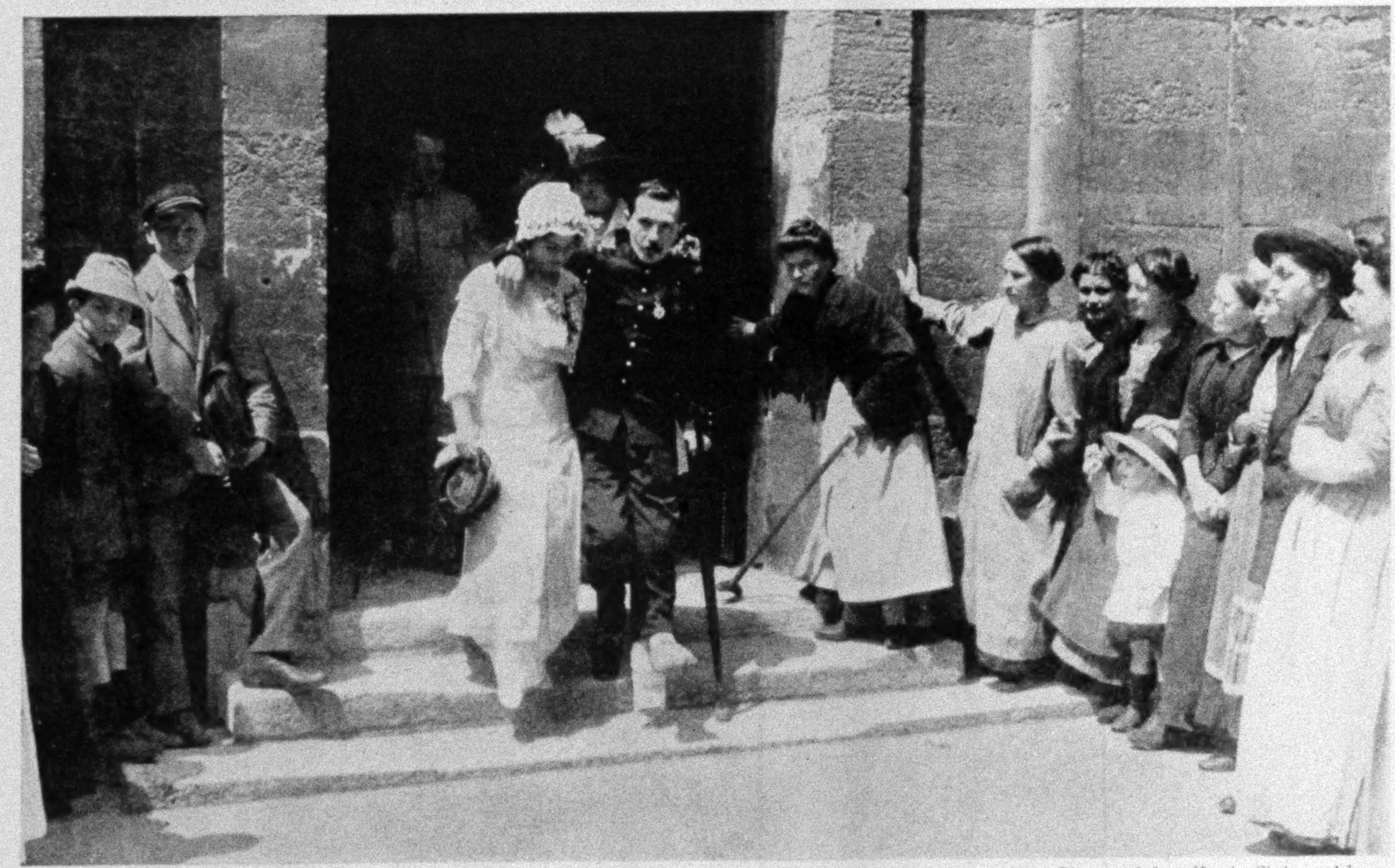
The needs of France cannot but stir the heart of every American. Tuberculosis has become prevalent as a result of this trench war. And the disease is spreading. Here is a call not only to aid the brave and liberty-loving French people, but also to help make this afflicted country healthy for our own sons and brothers who are soon to be there in such great numbers.

Hundreds of towns and villages have been destroyed in France. In her devastated regions men, women, and children are homeless and suffering for the barest necessities of life. We ought at the earliest moment to provide these peoples with the simplest essentials to begin life anew.

THE CRYING NEEDS OF WAR-WASTED COMMUNITIES

They need clothing, agricultural implements, domestic animals, especially horses and cows, seeds, fertilizers, tools, bedding, stoves, and the elementary materials with which to cover themselves by day and by night. Some idea can be formed of the amount involved in such an undertaking, with the knowledge that Mr. Hoover, through his magnificent organization, has advanced for governments and from private subscriptions $350,000,000 for relief in Belgium.

If there were no thought of protection and provision for our own people in France, can we hesitate generously to provide from our plenty that we may show some appreciation of our everlast-



Photograph from Harriet Chalmers Adams

MARRIAGE AT THE CHURCH OF ST. JACQUES DU HAUT PAS: PARIS

Having been decorated with the Cross of the Legion of Honor for an act of signal bravery, in the performance of which he was severely wounded, Lieutenant Pepetin returned to Paris and found a staunch and loyal helpmate to guide his literally faltering footsteps in the path of life.

ing debt to the people of our sister republic.

THE VITAL IMPORTANCE OF RED CROSS AID TO RUSSIA

We should do something and do it immediately to hearten afflicted Russia. On the Russian line of 1,000 miles there are only 6,000 ambulances, while on the French front of 400 miles there are 64,000 ambulances fully equipped.

Behind the lines in Russia are millions of refugees from Poland, Lithuania, and western Russia—driven from their homes by the German and Austrian armies—wandering from city to city, crowded into unfit habitations, huddled in stables, cellars, outhouses, and dying from disease due to exposure and insufficient food.

Russia needs our trained women to instruct hers in the art of nursing; she needs enormous quantities of the elementary articles necessary to relieve the very worst cases of pain and suffering.

Probably nothing that can be done immediately will do more to win this war than to strengthen Russia. The opportunity and the duty here alone are almost without limit in extent. Our Red Cross is the one agency which can exert itself effectively in this terrible emergency.

The foregoing are but the greater and more urgent needs of the moment. Other work of great magnitude must be done. Our Red Cross must maintain a supply service, whereby all the contributions in kind which our people make can be efficiently distributed. We must organize comprehensive plans to keep the families and friends of our soldiers and sailors informed as to the wounded and missing.

Indeed, the duties and the opportunities which confront our Red Cross have no precedent in history and are not within human estimate today. The War Council, however, can make definite plan and budgets only to the extent to which it is supported by the generosity of the American people.

EVEN THE CHILD CAN HELP

If each individual American now contributes his "bit" there can be no failure. America will, we feel sure in this, again demonstrate her ability to handle a big task in a big way.

If, in making a survey of the obligations and opportunities of our Red Cross a gloomy picture is drawn, we must not be discouraged, but rather rejoice in this undertaking and in the confidence that we can by our voluntary action render a service to our afflicted allies which will for all time be a source of pride and satisfaction in a good deed well done.

As President Wilson has said: "But a small proportion of our people can have the opportunity to serve upon the actual field of battle, but all men, women and children alike, may serve, and serve effectively."

We must and will all immediately concentrate our energies and efforts, and by contributing freely to this supreme cause help win the war.

THE NEEDS ABROAD

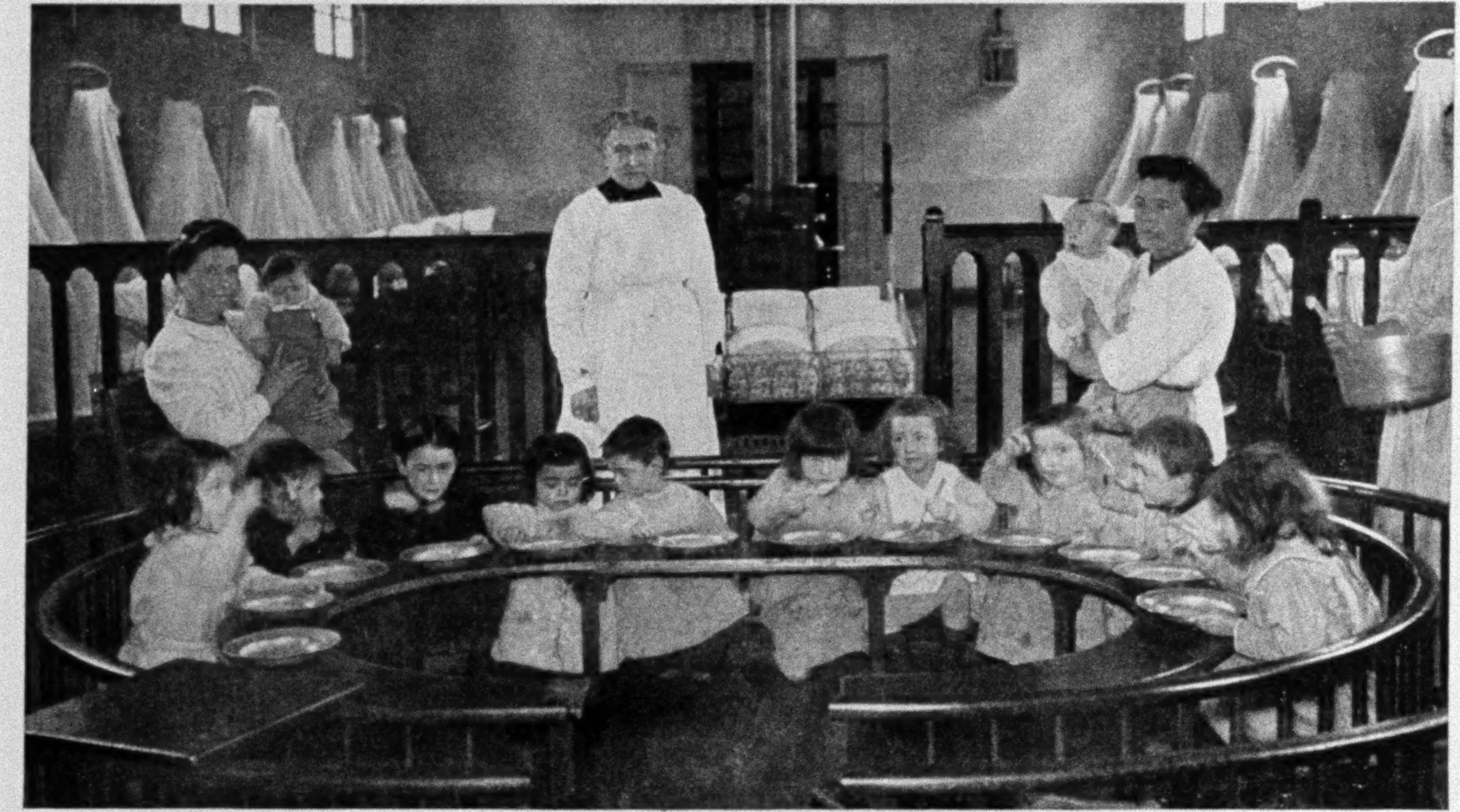
By Ian Malcolm

Member of the British Red Cross and of the House of Commons

IT IS difficult, nay, almost impossible, to imagine or to describe the damnable devastation of modern war.

It is one thing to glance at long lists of casualties in the morning papers, to read the descriptions of villages and townships ruined by artillery fire. It is quite another thing to sense, as I have had to do, the true inwardness of the vast human tragedy that is being enacted across the sea.

The silence of London and Paris, and of our great cities in France and England; the prevalence of black as the color in which most of our women are dressed, an eloquent testimony to the mourning that is in the hearts and homes of nearly every family in the land; the streets full



Photograph from Harriet Chalmers Adams

DINNER TIME IN THE INTERIOR OF THE CHILDREN'S HOME AT VILLE D'ARRAY

In the years to come these future citizens of a republic restored to peace and prosperity will hold as their dearest heritage the knowledge that their fathers died that their country might live of wounded in hospital uniforms, either walking or being driven out for an airing—these are some of the outward and visible signs of the ravages of war.

Ambulances driving gently down all the thoroughfares, the Red Cross flying over one or more large houses in every street of the residential quarter—these are tokens of the same tragic truth.

And abroad, in France and Flanders, you come nearer still to the true agony of the situation. How can I describe it? Think of the worst earthquake, of the worst floods, that have scourged and shocked you here at home; multiply the horror of your impression a hundredfold, and you will come near to the horrors of the Marne and the Aisne.

Multiply them a thousandfold, and you will realize the ferocity of carnage at the battles of the Ancre and the Somme.

Multiply them two thousandfold, and that is the picture of misery and pain and death after the great battles on the plains of Russia and in the mountains of Persia and the Caucasus.

Think of the ruin by floods in Flanders, with the stench of thousands of carcasses, human and animal, poisoning the atmosphere for miles around for those who must stay day and night in the trenches; think of the devastation by fire in France, where villages and woods and broad pasture lands are utterly wiped out of existence—not a house nor a church nor a tree left standing, where once there were thousands of families living in a condition as prosperous and happy as anywhere in the world.

A PURGATORY OF PAIN

Then turn your minds to the picture of some great engagement; try to conceive long trenches of men writhing in torture from poisonous gas or from liquid flame, soldiers smashed and disfigured by shell wounds, their lacerations indescribable as their heroism is undaunted.

Leave the trenches and retire behind the firing line with me. Here we are on roads lined with men on stretchers some dead, scores mortally wounded, hundreds upon hundreds of casualties in one or another degree of collapse. The middle of the roadway is filled by dozens of ambulances after every action; there is perhaps a mile length of hospital trains waiting in a siding to convey the wounded to base hospitals.

And all this purgatory of pain is dependent for relief upon the skill of our doctors, the tenderness of our nurses, the efficiency of our equipment—all of which means, and is dependent upon, the generosity of the public.

May I not take it for granted that just as the fighting manhood of the United States is soon to be with us in the trenches, so you of the Red Cross who have done so much for us in the past are now eager to be mobilized in the allied Army of Mercy, and of charity that is almost divine?

I assume that your organization is coming with us in increased numbers and with increased equipment; if necessary, to the mountains above and around Saloniki, to the plains of Egypt, to East Africa, to the waterless wastes of Mesopotamia—our tears and triumphs mingling beneath the shadow of the Red Cross flag.

WHERE UNASSUAGED WOUNDS CRY FOR AMERICA'S COMPASSION

Nay, further, I should like to assume that, with your resources inexhaustible as your hearts are warm, you will pour out of the fullness of your treasure into war zones where we have no men fighting, but where ambulance columns are desperately needed, such as Russia and Roumania.

You are wanted there, though the pride of Russia will prevent their even telling you so. I cannot think of a greater movement at this moment, in the interests of bleeding humanity or of Allied propaganda, than the offer of a fully equipped ambulance corps to work with the Russian army and for the Russian people.

Have I said enough to indicate to you the illimitable sphere of Christian influence that lies before you if you care to occupy it? Have I said enough to show you the dire needs of those who are fighting in the sacred cause that you have made your own?

Even so, I have left untouched all the work of caring for the homeless, starving populations, now being daily released

© E. W. Weigle.

PRIESTS AND NUNS WHO MINISTERED TO THE WOUNDED AT TERMONDE, BELGIUM

These shattered walls and piles of debris tell their own story of the terrific fighting which occurred in and around this little city in the early days of the war, when it was captured and recaptured many times. And ever in the thick of battle the "angels and ministers of grace" were at hand to succor the wounded and comfort the dying.

from the bondage of nearly three years' servitude, as slowly, but surely, we are driving back the Germans on the western front. It is, of course, for your great-hearted public to decide whether and when and how they can best intervene in this area of human desolation.

Unless I have totally misconceived your splendid ambition to rescue and to save in whatever part of the world war zone you are needed most, I have indicated to you by inference the tremendous part that money must play in the great drama of your intervention.

Am I to specify in detail a few of the objects upon which, it may be supposed, your money will be most usefully spent? I can only do so by reference to your own schedules of expenditures.

A THOUSAND NEEDS FOR DOLLARS

We have base hospitals, running into hundreds, I am sorry to say, in France and England; advanced base hospitals, and special hospitals for convalescents, for cripples, for the blind, for face cases, and homes for the permanently disabled.

We have hospital ships on the English Channel, in the Mediterranean, on the Adriatic, and on the Tigris.

We have hospital trains in England, France, and Egypt; hundreds of motor ambulances in all our theaters of war, with their repair cars and other necessary adjuncts.

There are thousands of doctors, nurses, orderlies, etc., to be clothed and fed; there are canteens for Red Cross men, rest homes for nurses worn out by assiduous work and ceaseless activity. We provide, of course, hospital clothing, drugs, dressings—all in enormous quantities for equipment and in reserve. These reserves are forever being replenished and forever rising in cost.

Then if you affiliate the Young Men's Christian Association to yourselves, there will be scores of canteens wanted—you can never have enough of them—for the soldiers sent to rest camps or to the base.

BACK ON CANADIAN SOIL.

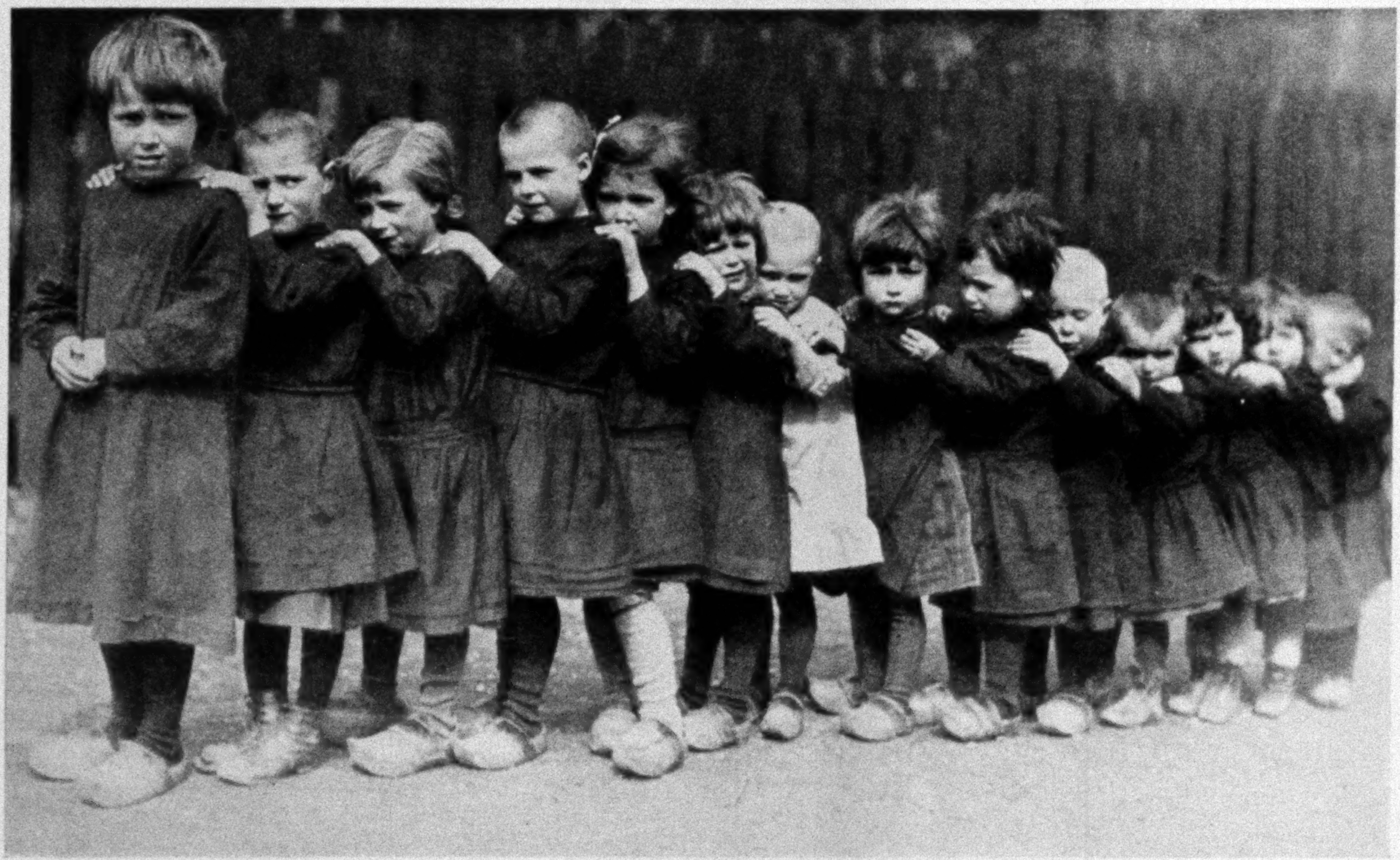
No fighting men of the world war have shown finer stamina than the boys of our neighbor nation, the Dominion. Their recent heroic offensive which wrested the supposedly impregnable Vimy Ridge from the Germans was only one of a long series of brilliant achievements. Whenever their condition permits, the wounded Canadians are brought home to recuperate, as in the case of this Dominion soldier, who is being tenderly nursed back to health at the Spadina Military Hospital, Toronto.

You will want accommodation for officers or men sent over to England from time to time for the regulation periods of leave.

I feel I could go on forever suggesting to you ways and means for the expenditure of all the money that you can collect in June and go on collecting afterward; but the time at my disposal, to say nothing of your patience, is exhausted, and I must close.

But I close with these words: We count confidently upon you to rouse, and it should not be difficult, the deep-seated spirit of humanity that permeates this Northern Continent of America — to rouse that soul of your people to translate itself into terms of hard cash; as an earnest that those who cannot fight will pay, and that, if it be the will of God that wars shall continue in this imperfect world, then you are determined to relieve and mitigate its horrors for its victims to the utmost of your power.

And may I add that if, in any way whatever, you care to ask the British Red Cross for the benefit of its experience in any quarter of the world during the tragic period through which we have passed, I am authorized to say that it will be promptly and gladly given; no longer to our "cousins," as we used affectionately to call you, but to our brothers and sisters united by a thousand ties, but none closer than that of an overmastering passion to join hands in drawing a great net of mercy through an ocean of unspeakable pain.



Photograph by Kadel and Herbert

THE DAUGHTERS OF FLANDERS' SLAIN

Suffering has stamped Tragedy on many of these faces which should reflect only Joy, the natural heritage of childhood. It is a pathetic coincidence that in their march formation these little derelicts of war should suggest the lock-step, once customary in our penal institutions.

Photograph from Harriet Chalmers Adams

A CORNER OF THE DINING-ROOM FOR WOUNDED SOLDIERS: LYON HOSPITAL IN 1917

In the multifold activities engendered by war woman has many spheres of usefulness, but none where her labors are more fruitful than in cheering and comforting the convalescent. A hospital dining-room would be a dreary place indeed were it not for her presence. The atmosphere of home is brought by her to the otherwise desolate places of earth.

BELGIUM'S PLIGHT

BY JOHN H. GADE

OF THE AMERICAN COMMISSION FOR RELIEF IN BELGIUM

YOUR brothers tell you their sons lie dead. Your heart aches and you try to understand it. You feel it—you think you feel it.

But it is not your son and you have no conception, even though he be one of the nearest in the world to you, of what your brother feels. It is your brother's son who lies dead. In six months, in three months, in one month your own son lies dead. It is for you to bring before this country now what it feels like to have your own son lying dead there.

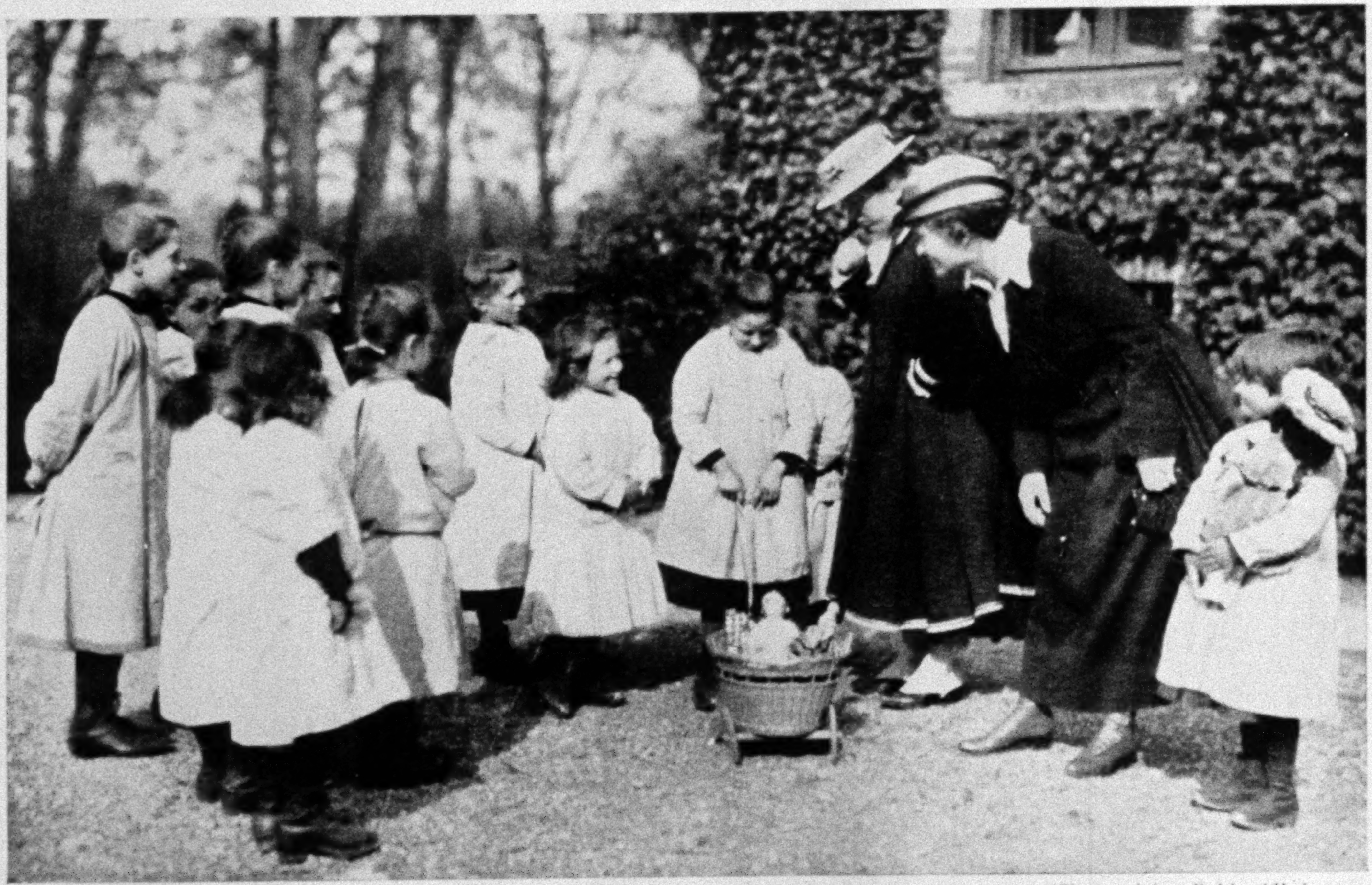
You are about to issue the S. O. S. call to this country, to save it to a certain extent from ignorance, but also from indifference, and also from carelessness, from selfishness.

I come from northern France, from southern Belgium, from the gallant strongholds in that great district. There firm virtues were the order of the day; stern mercies were before you from hour to hour, and the flames of chivalry still burn in the hearts of men and women. The horizon was dark, and it is difficult to bring it to this country.

REFLECTIONS OF ONE BACK FROM BELGIUM

When I came ashore, it struck me like a blow in the face. Is it possible this is the same planet on which I have lived; that this is the same world? Have I left the basic reality of things behind for the rudiments of life?

Where do these people get all the



Photograph from Kadel and Herbert

FLEMISH WAR ORPHANS AT VERSAILLES

Happily, the heart of youth responds quickly to sympathy and tender care. The gift of a doll will oft-times erase from the mind of a child memories of scenes which would sear forever the soul of an adult. These little refugees from Belgium are being nursed back to the normal life of childhood after having undergone experiences of incalculable hardship and misery.

things in the shop windows? Why do they look so careless and disinterested instead of so serious and earnest and sober? Where do they get the automobiles, the tires, the boots, the shoes?

No; I have left the real world beyond. The artificialities of life are gone; the conventionalities have been washed away, and here I have come back to where they still look the truth between the eyes.

Every man and every woman was a worker there. I remember one day going through the streets of Brussels. We had recently opened a soup kitchen. We had the pots; we had the pans; we had the kitchen; we had the food; we had everything except the workers.

I walked down the street and saw a couple of servants waiting in front of a building, and I asked, "What is going on inside?" They told me there was a meeting of the noble women of Brussels.

I went inside, and as soon as I entered they recognized me. I said, "I need twenty or more women right away—five to wash the floors, five to ladle soup, five to take away the dishes, five to carry out the garbage, and the remainder to do whatever work there is left."

I had scarcely finished my demand before the response came, almost as quickly as the appeal. There those women have been working for the last eight months, not once a week, but seven days a week. Those are the noble women of Belgium, noble of heart as well as of birth.

You have got to bring home here to our people conditions as they are. You have got to give them the vision. How awful the conditions are no one realizes. I will give you a single picture.

THE WOES OF SLAVERY

I will take the 18th of November of last year. A week or so before that a placard was placed on the walls telling my capital city of Mons that in seven days all the men of that city who were not clergymen, who were not priests, who did not belong to the city council, would be deported.

At half past five, in the gray of the morning on the 18th of November, they walked out, six thousand two hundred men at Mons, myself and another leading them down the cobblestones of the street and out where the rioting would be less than in the great city, with the soldiers on each side, with bayonets fixed, with the women held back.

The degradation of it! The degradation of it as they walked into this great market square, where the pens were erected, exactly as if they were cattle—all the great men of that province—the lawyers, the statesmen, the heads of the trades, the men that had made the capital of Hainaut glorious during the last twenty years.

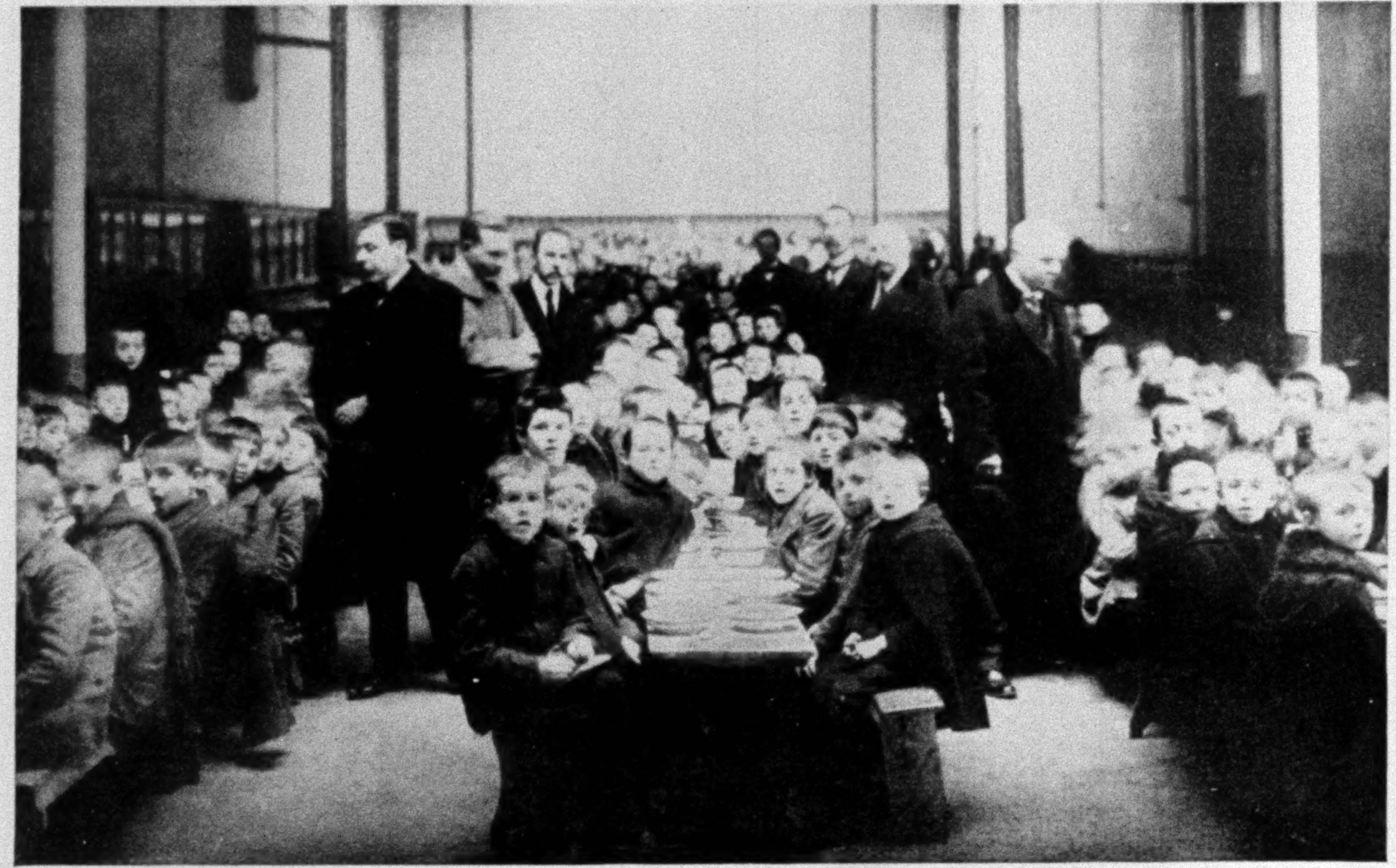
There they were collected; no question of who they were, whether they were busy or what they were doing or what their position in life. "Go to the right! Go to the left! Go to the right!" So they were turned to the one side or the other.

Trains were standing there ready, steaming, to take them to Germany. You saw on the one side the one brother taken, the other brother left. A hasty embrace and they were separated and gone. You had here a man on his knees before a German officer, pleading and begging to take his old father's place; that was all. The father went and the son stayed. They were packed in those trains that were waiting there.

You saw the women in hundreds, with bundles in their hands, beseeching to be permitted to approach the trains, to give their men the last that they had in life between themselves and starvation—a small bundle of clothing to keep them warm on their way to Germany. You saw women approach with a bundle that had been purchased by the sale of the last of their household effects. Not one was allowed to approach to give her man the warm pair of stockings or the warm jacket so there might be some chance of his reaching there. Off they went!

AT THE BIER OF A CITY

I returned to Mons that evening. You have sat at the funeral of your dear sons and you have heard the family weep, but you have never sat at the funeral of a city. I went in and I lost courage. I walked the streets of Mons all that evening.



Photograph from Paul Thompson

MEAL-TIME FOR LITTLE BELGIANS

The task of caring for the orphaned children of ravaged Belgium has, perforce, passed out of the jurisdiction of the American Commission for Relief in Belgium; but American contributions are still vitally essential to the continuance of this noble charity, and the funds are effectually disbursed for this cause through the agency of the American Red Cross.

There was not a street, there was not an alley, where the shrieking of women did not deafen your ears.

So they went. Then we saw them come back, too. I read the reports the next day in the paper at Brussels of how Germany had announced to the United States that, in her great mercy, she was taking the idle working men of Belgium in order that they might earn enough in Germany to keep their families provided with plenty of funds back in Belgium. Yes, I read this, and every other edict issued by Germany, and I found no truth in them.

I saw them come back in the cars. We carried the corpses out of the cars; we carried the poor, broken wretches to the hospitals after three weeks of work in Germany.

They took me out to the front and I tried to get through. It was impossible. They did not want me to learn the truth. But I got a man through and back to me, and he told me what they did, what they had done with the men there. They tried to put them in the trenches and make them dig. What had been the result?

THE UNCONQUERABLE COURAGE OF MARTYRS

Those men, filled with love for their country, refused to work; so they took twelve of the best of them and tied their hands to posts outside of the city and let them hang there for thirty-two hours without nourishment, and then they fainted or died rather than fight against their brothers in the trenches! That is just one of the stories of the courage of those men over there!

I see them again across those terrible swamps, up to their waists in the mire and dirt, shot at with blank cartridges in order to make them sign the contracts so that Germany might publish to the world that they were willing workers; that they had come from Belgium to Germany in order to execute the work they needed so much.

It is for you to bring these scenes before the public. You cannot all fight, but you can bring these scenes before the public and help those who do fight.

I will tell you about one man who stood beside me in Valenciennes. He came to me in the early morning and said, "I cannot work any more; I have got to leave."

I said, "You are the captain of your own soul. You know what you are doing."

"Yes," he said, "I have stood this as long as I can; I have got to quit." So he quit and left the work because it was too horrible.

What is the sequel? Today, in these early spring days, he is leading his British soldiers into battle because he preferred to fight rather than to see the German officers opposite him, with his hands tied. He fights the hardest because he is once more approaching that little country which he loves so much.

ARE WE "THE MOST GENEROUS PEOPLE IN THE WORLD?"

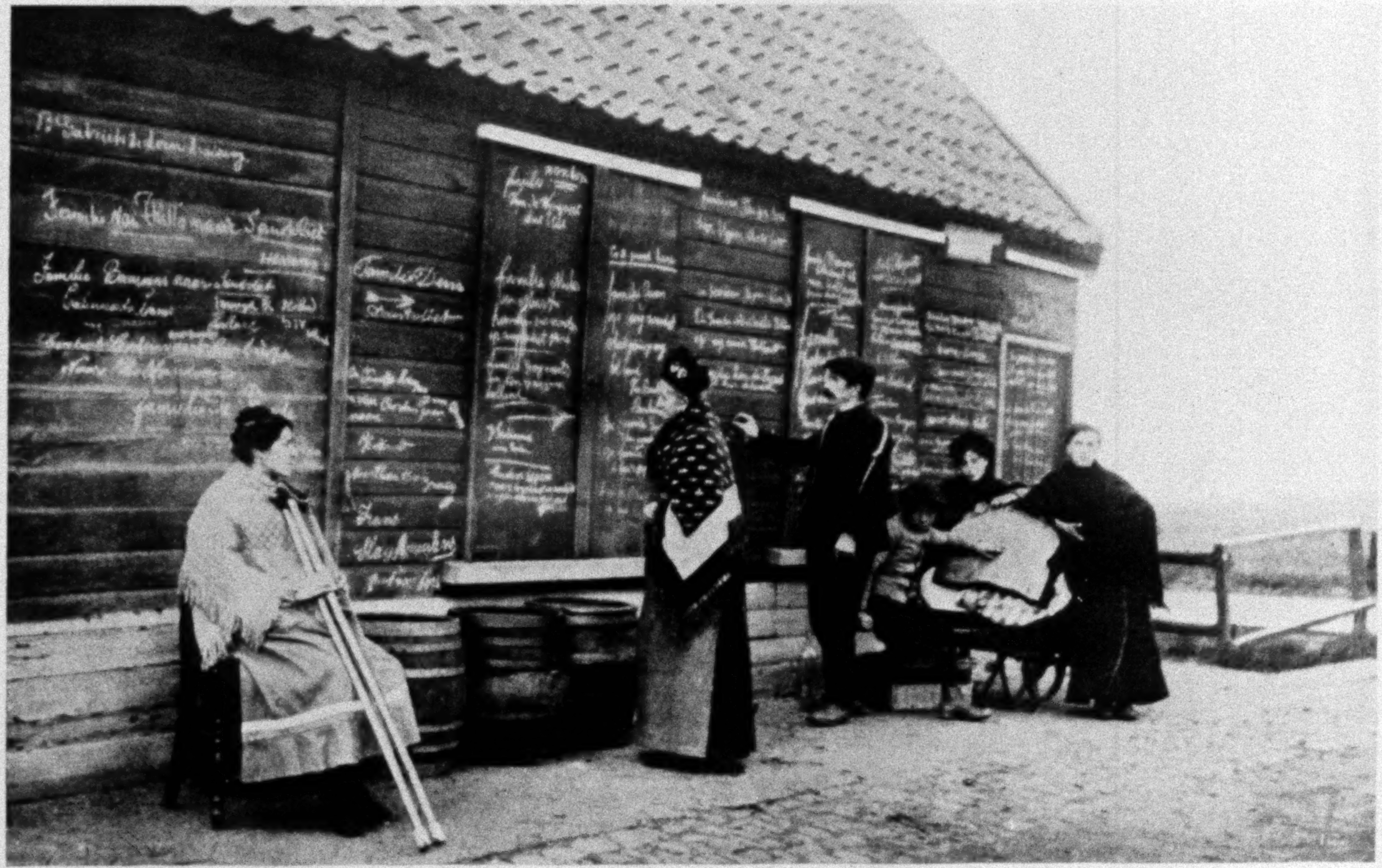
You are going to make an appeal to this country. You are starting to do so. On behalf of the Commission for Relief in Belgium, six or seven weeks ago, I talked one day in Boston. After the meeting the Bishop of Massachusetts was so kind as to say he would come to the house where I was going to dine that evening.

You are as well acquainted with the fact as I am that the Bishop of Massachusetts made the most successful appeal to this country ever made in the raising of church pension funds. The task was believed impossible—that task in which he succeeded beyond the sum which even he expected to raise.

He turned to me that evening and his first words were these: "You are going to have the best time of your life appealing to this country for funds. You are going to deal with the most generous people in the world, and you are going to deal with their best impulses."

I have found it to be the case! I approached with hesitancy, with timidity. I am no speaker, least of all one who can make a successful appeal, especially to those I have known best. When I asked for hundreds, I received thousands. When I asked for thousands, I received tens of thousands.

It showed me that our people are alive to the fact that now they must give, and give with both hands; that now no longer



BELGIAN FUGITIVES INSCRIBE THEIR ADDRESSES ALONG THE WAY

Driven from their homes and forced to flee almost without warning, parents and children were often hopelessly separated. To facilitate a reunion in the land of their exile, names and directions were written on every available space along the route of flight. The story of the exodus was written in chalk in a manner singularly effective and strikingly expressive.

those who cannot enter the conflict should stand aside and shame their country. I was dumbfounded at the response I received from all sides, from high and from low.

"FIVE KIDS OF MY OWN, BUT READY TO HELP"

Again and again I appealed in behalf of the children, and some working man in his embarrassment would arise in the throng and finally would bravely say, "Well, I have got five kids of my own, but I can take on another one if you want me to." That was the response from all sides.

I remember one day in particular. When I went to my work that morning a friend said to me, "You look rather discouraged this morning." "Yes," I said, "I see no hope in the situation today." He said, "You will never be discouraged if you will follow the Great Captain the way I do." That was, of course, the response of the Bishop of Massachusetts, given to me in that way.

It seemed an almost impossible, hopeless task to raise these hundreds of thousands of dollars, but he said: "It seems very easy after you have gotten frankly into the hearts of the people, after you have taken them right into your confidence, after you visualize the situation.

"If you can visualize your work, if you can make them see the things in the battlefield, if you can make them feel and give them the vision as you have it, then you will find the response is immediate and glad. It is not only those who have been educated in giving to whom you can successfully appeal, for generosity lies in the human heart, and it is the most blessed thing man can do, to give rather than to receive."

GIVING WITH BOTH HANDS

In New York I went to see a man—one of the most influential, one of the wealthiest men of this country—to thank him for the thousands and thousands of dollars he had sent to Belgium. I gave him the figures and showed him the devastated condition of northern France and showed him the shattered fields, without a tree standing, without a fruit tree that will ever bear fruit again.

His reply was the same reply you are going again and again to receive: "What am I going to do? Belgium is closed. How can I help? I would like to help more than I did."

I replied to him, "Here is the Red Cross. It knows this work and how it is being conducted and how it should be done." He then said most promptly, "I have given with one hand before; now I am going to give with two hands!"

That is the reply which will come from all sides in this work we are now undertaking.

BIND THE WOUNDS OF FRANCE

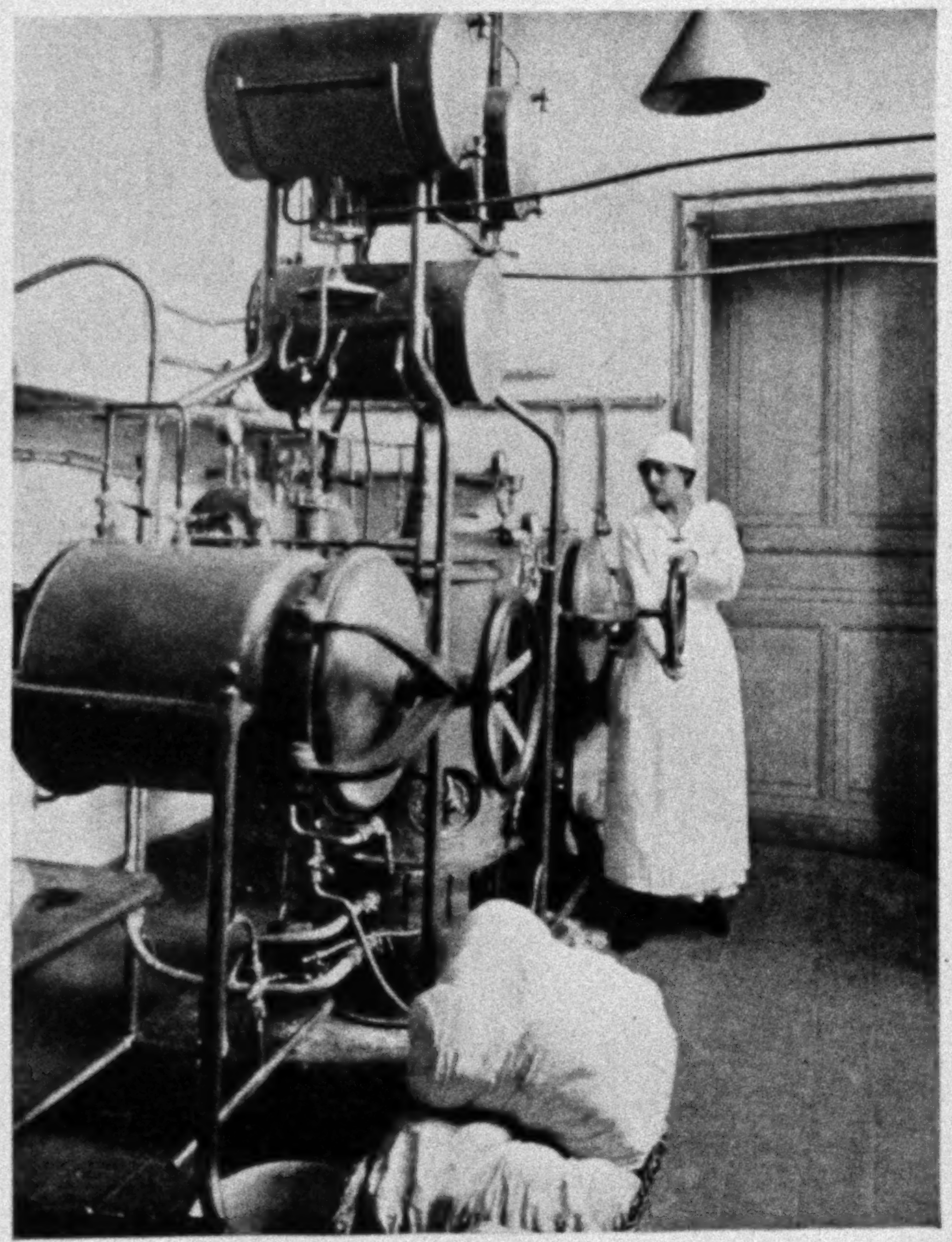
By Herbert C. Hoover

Chairman of the Committee for Relief in Belgium

I ALWAYS feel an infinite embarrassment at the reception and overestimation of the part that I may have played in what is really an institutional engine, and the credit for which belongs, not to myself, but to some fifty thousand volunteers who have worked for a period now of nearly three years.

During the whole of this period we have had as one of our duties the care of the civilian population in northern France. We are, I think, the only Americans who have been in intimate contact or even in any contact with that imprisoned population. We are the only group who know of their suffering, of their misery, of their destruction, and who know of what confronts those people even after peace.

We have always entertained the hope that possibly some other engine, some other organization, might be found that could adequately take in hand their wounds and bind up their difficulties, re-



THE STERILIZING CHAMBER IN THE AMERICAN HOSPITAL AT NEUILLY

Such apparatus must be multiplied many times if American soldiers are to be safeguarded from the dangers of septic poisoning. The Red Cross has the facilities for installing these sterilizing chambers, provided the American citizen will contribute the sums necessary for their purchase. These are the "big guns" with which medical science wages successful war on tetanus.

IN THE WONDERFUL AMERICAN HOSPITAL AT NEUILLY: A NURSE CLEANING HER INSTRUMENTS

We may well feel proud of the hospitals which American philanthropists of both large and small means gave to France before our government joined military forces with the Allies. Both in equipment and in management these institutions mark the highest achievements in surgical science. Photographs by Paul Thompson.

habilitate them into a position again of self-support.

That is probably the greatest problem of all the war. There is an untold destruction of property, a total displacement of population, an enormous loss of human life, a loss of animals, a loss of implements — a population of probably three millions of people totally and absolutely unable to get back onto their feet without help.

WHERE ONLY THE VULTURE COULD LIVE

About the end of March the retreat of the German army over a small area opened up to the world a vision of what had really happened to the three millions. It was but a little parcel in France that was recovered, with a population of only 30,000 people.

I had visited that area from behind the lines and again visited it from the Allies' side. I found that every village, with the exception of two small areas, had been totally destroyed.

The Germans had erected battering rams, had destroyed and burned villages, had leveled everything to the ground, had gathered up all the agricultural implements in open squares and burned them, had taken all the animals, and had removed all the male portion of the population between the ages of 18 and 65 years.

Even the fruit trees have been destroyed, and that entire section, of probably 60 miles in length and over 20 or 25 miles in depth, has been devastated to such an extent that those people cannot get back onto their feet without an entire replacement of all of the engines by which production is carried on.

This is but a sample of what we have to expect from practically the entire area. The cost of rehabilitation runs into figures which should startle all except Americans, and perhaps Americans even in the larger figures in which we have begun to think.

THE DAMAGE RUNS INTO BILLIONS

I made a rough estimate of the immediate amount of money required to rehabilitate that little parcel of population and to support them for one year; to provide them with their implements, to give them the roughest kind of housing, to get them back to the point where they may get the land into cultivation and get into self-support, would run somewhere from seven to ten millions of dollars.

Altogether the north of France is probably faced with a total expenditure for rehabilitation which will reach a billion and a half dollars.

There are other problems in France also demanding immediate help. Tuberculosis from exposure in the trenches, from a population in many sections partially undernourished, has spread to the most alarming degree. The French, busy and intent upon the war, with limited resources, have not neglected the problem; but they need help, they need sanitary support, and they need care and direction. I am informed that there has been an increase above normal in tubercular cases in France, in the men alone, of over 600,000.

There is still a further field in France, and that is the children. The orphans of France increase day by day. That service is one which probably touches more nearly to the heart of every American than any other we can do.

BLEEDING FRANCE ON LIBERTY'S PYRE

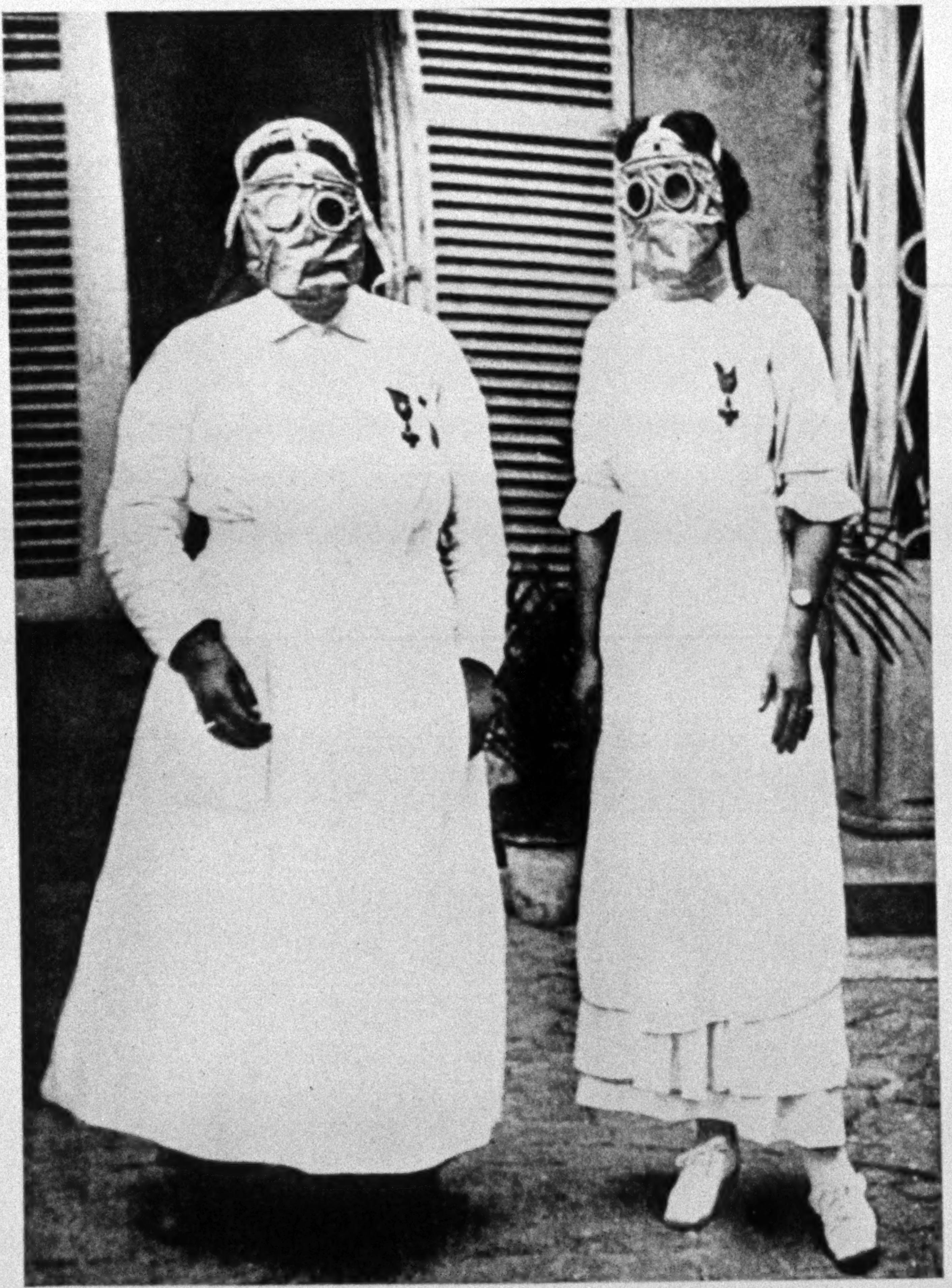
On the children of France rests absolutely the hope of France, because today France is sacrificing her manhood on a pyre devoted to liberty and a pyre devoted to our protection.

In these three problems the American people have an outlet for all of their generosity, for all their capacity of organization, and that has never before been presented to them.

The problem of Belgium is a problem much the same as France, but a problem of much less dimensions, so far as we see it today.

If the Red Cross could now consolidate the whole of effort directed toward civilian charity to civilian support in France, it would have laid the foundation for probably the greatest work which the American people must undertake as one of the aftermath results of the whole war.

I have long had the feeling that all civilian charities in Europe should be better organized and better consolidated



Photograph by Paul Thompson

THE HOSPITALS ARE NOT SPARED

These nurses, both of whom have been decorated for bravery, perform their acts of mercy in the front line clearing hospital. Poisonous gas is no respecter of the Red Cross, so it is necessary for the young women to wear the same protective masks which the fighting men use in warding off the fatal fumes released by the Germans.

Photograph by Paul Thompson

SURGICAL DRESSING-ROOM, NURSES, AND INTERNE IN U. S. ARMY HOSPITAL RAILWAY CAR

Every facility for performing emergency operations en route from a battlefield to a base hospital is provided in these modern operating rooms on wheels

in the United States. We have had a multitude of bodies engaged in that effort, a multitude of overlapping effort, a multitude of overlapping in collection of support, and a multitude of overlapping in distribution on the other side.

HELPING HEROIC PEOPLE HELP THEMSELVES

Furthermore, as the war goes on, as times become harder, we will require a greater and a better organized effort in order to maintain that support. It requires an effort that not only covers the field of charity, but also covers the field of helpful finance. I do not think that any thinking person wishes to pauperize a population by pouring charity upon them.

We ourselves have undertaken to do some rehabilitating and have made some study of that subject, which is only one of the three great problems.

We have developed a method by which we believe that these people may be put back on their feet and made self-supporting again. If perhaps only 10 or 15 per cent of the total cost may be founded in charity, these people themselves will repay the entire cost of their reconstitution. They must be given time. The 80 per cent may be accomplished by financial measures, but some one has to provide the first 10 or 15 per cent to give the foundation for any adequate development of that problem.

Since coming to America I have had a number of discussions with your officials, and I have urged upon them, and they are only too glad to undertake, that problem as the problem of the Red Cross.

The Red Cross is perhaps founded

LUNCHEON HOUR FOR THE NURSES IN THE AMERICAN HOSPITAL AT PARIS

No American undertaking in France since the beginning of the European war has received or deserved more enthusiastic endorsement than this great institution, which daily is mending the maimed who are rushed here from the trenches in Flanders.

fundamentally for the care and comfort of soldiers, but we are not fighting this war alone for the direct efficiency of battle. We are fighting here for infinitely greater objectives, and there is no support that can be given to the American ideal, to the American objective of this war, better and greater than a proper organization of that side of our civilization which we believe is today imperiled.

We are fighting against an enemy who had become dominated with a philosophy, with an idea, for which there is no room in this world with us. It is a nation obsessed with the single idea that survival of the strong warrants any action, demands any submergence of the individual to the state, which justifies their mastery of the world.

Our contention of civilization lies in the tempering of the struggle for existence by the care of the helpless. The survival of the strong, the development of the individual, must be tempered, or else we return two thousand years in our civilization.

While the Red Cross devotes itself to the strengthening of the strong, to the support of the soldier, it is a duty of the Red Cross to illume that part of American character and American ideal which stands for the care of the helpless.

I had hoped, and I think that all of your officials had hoped, that it would be possible to now congregate the strength of the whole nation into the Red Cross in order that it might undertake this, possibly the greatest work which we have yet to perform, and that is to bind the wounds of France!

DEVASTATED POLAND

BY FREDERICK WALCOTT

I WANT to impress upon you two things—what the Prussian system stands for, and what that system is costing the world in innocent victims.

You are all familiar, more or less, with the story of Belgium. You can never appreciate what that tragedy means until you have seen it. I want to stop just a moment in Belgium to give you two or three figures to take away with you, and pay a tribute to an organization that has been supreme there ever since the war began.

You must remember that in Belgium nearly five millions of people for many months now have been completely destitute and are getting their one meager meal per day, consisting of approximately three hundred grams of bread—a piece of bread about as big as my fist—and a half liter of soup—approximately a pint of soup in 24 hours; a nation, in other words, whose sole living is obtained by going up and standing in line from one to three or four or five hours a day, to wait, without shelter from the weather, for one meager meal a day given to them by charity.

That undertaking has cost approximately fifteen millions of dollars per month in cash for more than two years. Ninety-five per cent of that money is being contributed by the English and French governments.

It takes between 50,000 and 60,000 people, most of them volunteer Belgians and French in Belgium and in that occupied territory of northern France, to distribute this food; and that great undertaking is being supervised by a small group of loyal Americans, who have been working from the beginning without pay under the leadership of an inspired genius, Mr. Herbert C. Hoover.

BORN AND BRED TO THE HARDENED HEART

I went into Belgium to investigate conditions, and while there I had opportunities to talk with the leading German officials. Among others I had a talk one day with Governor General von Bissing, who died three or four weeks ago, a man 72 or 73 years old, a man steeped in the "system," born and bred to the hardening of the heart which that philosophy develops. There ought to be some new word coined for the process that a man's heart undergoes when it becomes steeped in that system.

I said to him, "Governor, what are you going to do if England and France stop giving these people money to purchase food?"

He said, "We have got that all worked out and have had it worked out for weeks, because we have expected this system to break down at any time."

He went on to say, "Starvation will grip these people in 30 to 60 days. Starvation is a compelling force, and we would use that force to compel the Belgian workingmen, many of them very skilled, to go into Germany to replace the Germans, so that they could go to the front and fight against the English and the French.

"As fast as our railway transportation could carry them, we would transport thousands of others that would be fit for agricultural work, across Europe down into southeastern Europe, into Mesopotamia, where we have huge, splendid irrigation works. All that land needs is water and it will blossom like the rose.

RIDDING THE LAND OF THE WEAK

"The weak remaining, the old and the young, we would concentrate opposite the firing line, and put firing squads back of them, and force them through that line, so that the English and French could take care of their own people."

It was a perfectly simple, direct, frank reasoning. It meant that the German Government would use any force in the destruction of any people not its own to further its own ends.

I had never thought in such terms. I had read von Bernhardi and others, but I did not believe them, and the whole point of view was new; but gradually the truth of it all began to dawn upon me.

After that some German officials asked if I would not go to Poland, because there the situation had gotten the best of them. There some three millions of people would die of starvation and exposure if not fed between then, a year ago, and the next crop, last October. They said, "If that thing goes on and on, it will demoralize our troops." Again that practical reasoning.

I hurried into Poland under the guidance and always in the company of German officers, many of them very high officers, men on the general staff.

I want briefly to give you a word picture of what I saw there, and again drive home the point of what that system stands for. Picture Poland, that country beween Russia and East Prussia, looking like a man's foot, with the foot pointed toward East Prussia.

In the fall of 1914 the Russian offensive had successfully driven the Germans back almost to East Prussia. There they dug themselves in for the winter, two and one-half millions of Russians and two and one-half millions of Germans, in a north and south line nearly 300 miles long, from East Prussia to the north and down to Galicia.

WHEN RUSSIA'S VERDUN FELL

It took ten months for the Germans to prepare the greatest offensive that has ever been known in military times, under General von Hindenburg. They anticipated that in the retreat that might follow every railroad bridge would be destroyed, the railroads would be torn up, the highways and culverts and everything would be gone, and they must make a supreme effort to be ready for all these contingencies. That started in August, 1915.

By the collapse of their great fortification at Lodz, the "Verdun" of the Russian line, about 50 miles west of Warsaw, which stood there as a bulwark supporting Russia and Poland against any inroads by the Prussians, the situation was changed.

That fortification had been built eight or ten years back by money which the Russians had borrowed from the French Government. I spent the entire day out there. It took only five shots from the huge howitzer, "Fat Bertha," named for Miss Bertha Krupp, that throws a shell weighing 1,900 pounds, with an effective range of 22 miles, to completely demolish that magnificent fortification.

The gun was located on a concrete foundation 13 miles away from one of the principal forts—the one that contained the most munitions. They knew twenty millions of marks' worth of provisions were in that warehouse. They knew exactly how much ammunition was in each one of the twenty-six forts in a semicircle facing Prussia, and they picked out the one that contained the greatest quantity. Then they fired four shots, each one of which went astray.

Each one made a crater in that field, a place 150 feet in diameter and 30 or 35 feet deep.

THE UNPRECEDENTED POWER OF THE BUSY BERTHAS

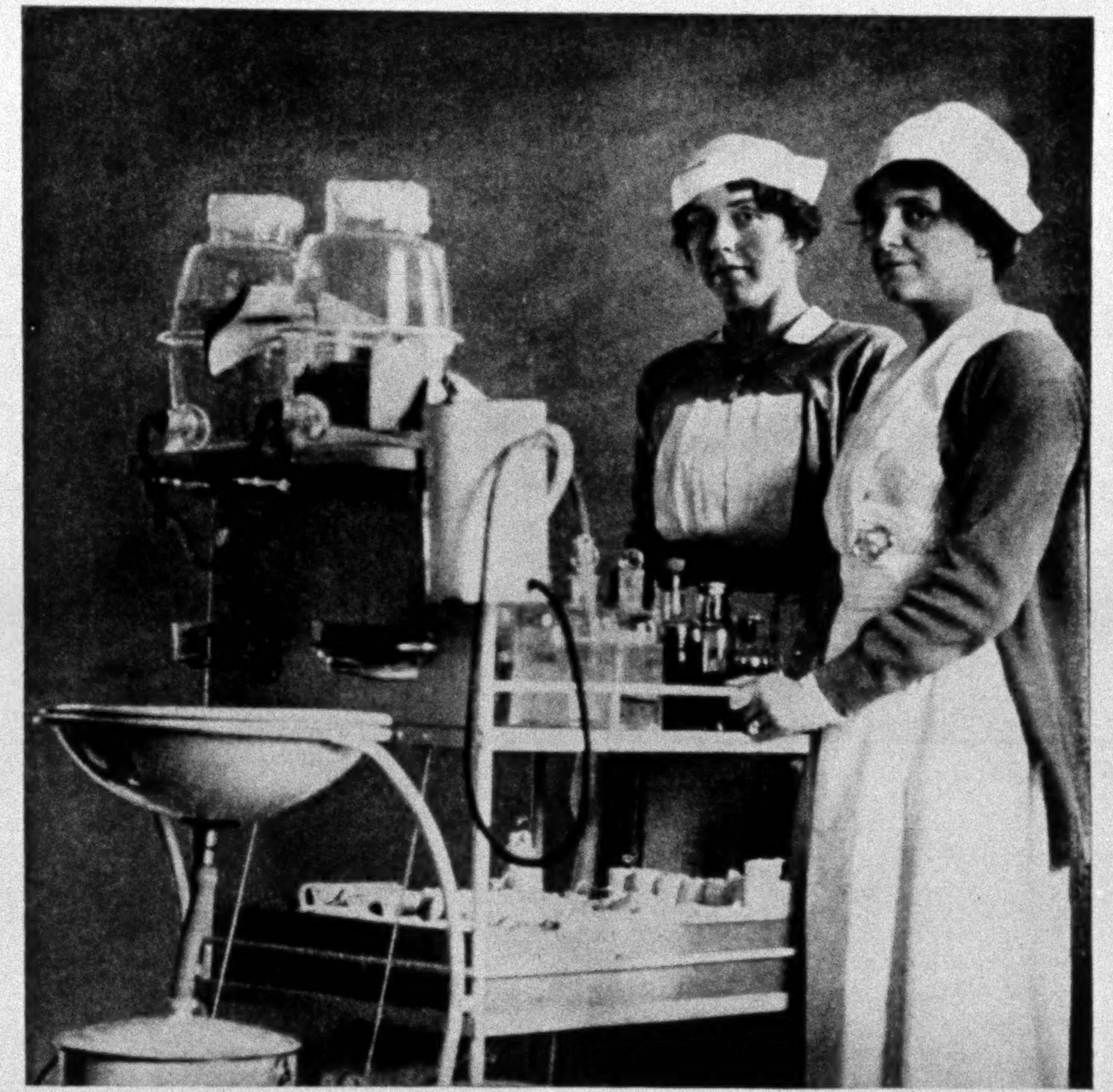
The fifth, getting the range by aëroplane, struck the center of that fortification, and the combined explosion of that shell with the explosion of the ammunition in the firing pits, detonated by the explosion of the shell, threw chunks of concrete one-fourth the size of a big room out into the field as if they were paper, turned over those six- and eight-inch guns, mounted on their heavy carriages, with 15-inch steel turrets over them, and dumped them out in the field as if they were nothing.

I went around through some of the firing pits that were more or less intact, and there the German officer pointed out to me the forms of men against the concrete.

He said 450 men were killed instantly; that in some of the firing pits they were plastered up against the wall and flattened as flies would be against a windowpane, so that they had to spade the bodies off.

The whole Russian line collapsed with the surrender of that fortification. The commandant of the Russians telephoned to the German commander and said, "We will surrender the fortification if you will stop firing."

"No," he said, "not until you have sur-



Photograph by Paul Thompson

SISTERS IN THE ARISTOCRACY OF SERVICE TO MANKIND

Many American girls are already serving in the hospitals of France, and the number will have been enormously increased before General Pershing's expeditionary force goes into action. In this illustration are shown the daughter of a prominent New York capitalist and a member of the British royal family at work in the American Hospital in Paris.

rendered all your men; and if you burn that warehouse we will not take your men alive."

"It is all yours." And it was all over with the Russians in Russian Poland. That Russian line, 300 miles long, swept across Russian Poland and clear into Russia before it stopped, trying every now and then to resist, but failing, continued its retreat.

That gray mass of men traversed three great military highways, fighting along the southern road commencing 30 miles west of Warsaw and going 230 miles toward Moscow, clear into Russia, covering an area three times the size of New York State and nearly three times the size of New England, excepting Maine, containing fifteen millions of Poles.

AN EMPIRE LAID WASTE

I motored along those roads, the two running toward Petrograd and the one toward Moscow. They are all in very much the same condition. The German officers and the Poles who were with me,

Photograph by Stanley Washburn

THE EXODUS FROM POLAND

Fleeing from their homes to escape the ruthless fury of the conqueror, thousands of these unfortunates died of starvation, leaving their bodies upon the roadside to mark the line of march of a stricken people; and those responsible for this great crime with ruthless thrift gathered the bones of their victims to fertilize the fields which the dead had once called home-land.

with whom I consulted, agreed in this estimate, that in about six weeks time, a year ago last fall, approximately one million people along that southern road were made homeless by the burning of their dwellings, and of this one million people at least four hundred thousand died in the flight along that one road.

Of the balance approximately half were saved and gathered by the Germans later into refugee camps, and today, according to the Central Relief Committee of Poland, approximately seven hundred and fifty thousand of those miserable refugees who escaped with the Russian army are now in Russia, many of them in Siberia, and more dead than alive.

HUMAN BONES FOR FERTILIZER!

It is those people whom the committee has been trying to relieve, because nobody has been able to get food or help into Russian Poland proper, with the exception of one undertaking of the Rockefeller Foundation.

As I motored along that road, only a few weeks after that terrible retreat, I began to realize something of what had happened. Both sides of the road were completely lined for the whole 230 miles with mud-covered and rain-soaked clothing. The bones had been cleaned by the crows, which are in that country by countless thousands. It is a rich alluvial country. Three-quarters of the people are agriculturists and one-quarter industrial.

The Prussians had come along and gathered up the larger bones, because they were useful to them as phosphates and fertilizer. The little finger bones and toe bones were still there with the rags of clothing.

The little wicker baby baskets, that hold the baby as he swings by a rope or chain from the rafters of the peasant's cottage, were there by hundreds upon hundreds. I started counting them for the first mile or two and gave up in despair, because there were so many.

Photograph by Stanley Washburn

POLISH JEWS LOOKING FOR A NEW HOME

These wanderers in a wilderness of woe, like their forebears in Palestine, have a pillar of fire to guide them by night; but it is to guide them away from their homes, kindled by the torch of war, instead of a flame to pilot them to a Land of Promise.

We began to investigate the conditions of those who were still alive, those refugees who were homeless. We saw no buildings in that whole 230 miles. Everything had been destroyed; nothing but the bare chimney, black and charred, was standing; no live stock, no farm implements, in all that vast area.

I saw with my own eyes between fifty and sixty thousand of the six or seven hundred thousand of those refugees who had been gathered together, about a thousand to a building, in rude, hardly weather-proof barracks hurriedly put up by the Germans.

A STATE OF INDESCRIBABLE WOE

There they were, lying on the ground in broken families, getting one starvation ration a day, dying of disease and hunger and exposure. The buttons from their clothing were gone; their clothes had to be sewed on.

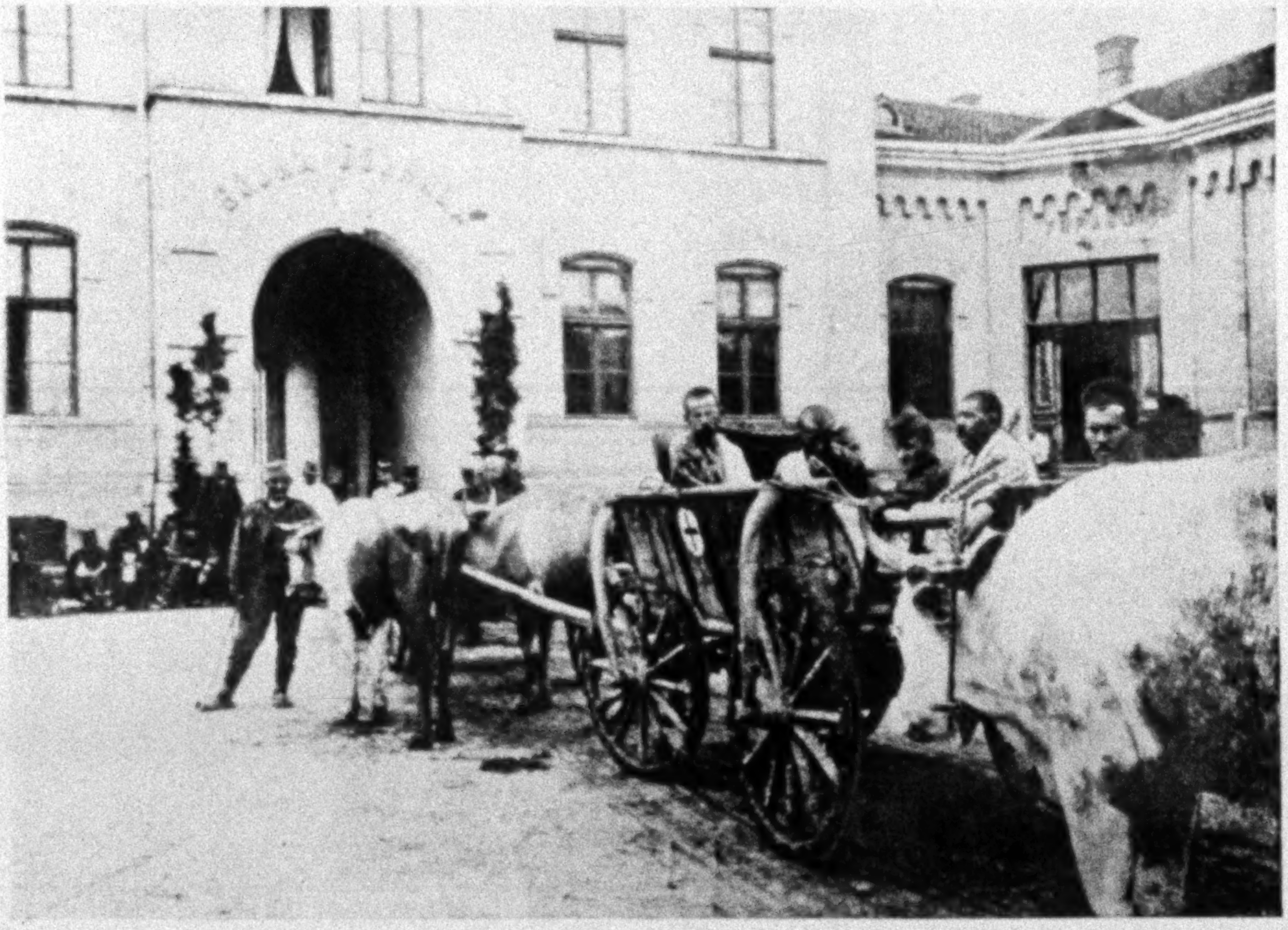
When I saw them they had not had their clothes off for weeks. There were no conveniences of life. They were in a state of bodily filth that is indescribable.

Going back to the cities, where the destruction was not so awful, we saw little people and grown people, mothers and children, sitting on the sidewalk, leaning against a building, sometimes covered with snow or rain-soaked, too weak to lift their hands to take the money or bread that we might offer them.

All the wealthy people of Poland were giving everything they owned to save their nation.

One day one of the Poles, the head of the great Central Relief Committee of Poland, a wonderful man, wealthy before the war, but who has given everything he possessed to save his people, showed me a proclamation and translated it for me. It was written in Polish and I could not read it. It was signed by the German Governor-General, and the significance of it was this: It was made a misdemeanor for any Pole having food to give it to any other able-bodied Pole who would refuse to go into Germany to work.

That meant that this "system" had put it up to the head of any of the various families to go into voluntary slavery in



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IN FRONT OF THE BELGRADE MISSION OF THE RED CROSS UNIT IN SERBIA

Germany, knowing that he could not hear from his family or communicate with them, knowing that he would be back of a barbed-wire barricade with an armed guard to keep him from escaping, with one blanket to sleep in on the factory floor at night; knowing that the money he earned would be taken for the food he ate, leaving his family in starvation.

"STARVATION A GREAT FORCE"

I took this matter up with the Governor-General and asked him what it meant.

He said, "I do not know; I have to sign so many of those things; but," he continued, "go to the Governor-General of the Warsaw district and he will tell you the whole story."

I went there in a rage, and when he told me that those were the facts, I got up and said: "General, I cannot discuss this thing with you; it is worse than anything I ever heard of. I did not suppose any civilized nation would be guilty of such a thing as this"; and I started to walk out.

He said, "Wait a minute; I want to explain this thing to you. We do not look at it as you do. Starvation is a great force, and if we can use that to the advantage of the German Government we are going to use it.

"Furthermore, this is a rich alluvial country. We have wanted it and needed it for a long time, and if these people die off through starvation, perhaps a lot of German people will overflow into this country and settle here; and after the war, if we have to give up Poland, the question of the liberty of Poland will be solved forever, because it will be a German province."

STILL THE "SYSTEM"!

Still the reasoning of that "system"! As I walked out, General von Bernhardi came into the room, an expert artilleryman, a professor in one of their war colleges. I met him the next morning, and he asked me if I had read his book, "Germany in the Next War."

I said I had. He said, "Do you know, my friends nearly ran me out of the

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CRUDE AND SPRINGLESS AMBULANCES ON THE RUSSIAN FRONT

A conveyance of any kind was a luxury for the Russian wounded after the fall of Warsaw. Compared with 64,000 ambulances on the 400-mile front in France, Russia has only 6,000 ambulances to serve the wounded on a front of 1,000 miles.

country for that. They said, 'You have let the cat out of the bag.' I said, 'No, I have not, because nobody will believe it.' What did you think of it?"

I said, "General, I did not believe a word of it when I read it, but I now feel that you did not tell the whole truth"; and the old general looked actually pleased.

What is true in Poland is true in Serbia and in Roumania. In Serbia approximately three-quarters of a million people have died miserably. A German captain who had been there three months, in that campaign through Serbia, told me that he saw the Bulgarian soldiers killing innocent men and women and children along the road with their bayonets; that it got too much even for him, and he could not stand it and came back. He said they had typhus in every city he visited in Poland.

In Roumania practically six hundred thousand people have been murdered in cold blood by the Turks. All the armed forces in that country are officered by Germans, so they are in a sense guilty of that, too; they are parties to it.

A MAD DOG AMONG NATIONS

There is a wild dog, a mad dog, loose. That system has become so ingrown that it threatens to involve the German people themselves. I tell you, ladies and gentlemen, it is worth while, if it costs everything in the world, to stop that system!

Ever since the signing of the Declaration of Independence we have welcomed people who have come to these shores to get away from religious and political persecution. They have come here to enjoy life and liberty and the pursuit of happiness. I hope and we all hope that these shores always will welcome those people.

The people that came here, particularly the Germans that came in 1848 and the two or three years following, and in 1872 and thereafter, knew why they came, and now we know why they came. For two years we have been suspicious of the

Photograph from Brown Brothers

AN AMERICAN AMBULANCE ROLLING THROUGH A RUINED TOWN IN FRANCE

The locomotive engineers of one of our great Western railway systems have asked their general manager to deduct from their wages during the period of the war a voluntary contribution of fifty cents a month. There are 450,000 men in the train service, and that would mean a substantial contribution to the Red Cross.

hyphen, but it behooves us, as a free, liberty-loving people, to get over that suspicion, to dispel from our hearts rancor and hatred, because the fire of Americanism has fused that hyphen in an incredibly short time, and we must assume that the German-American today is one with us, and that free America, with all its citizenship, is going in whole-heartedly, with money and with men, to fight for a free world.

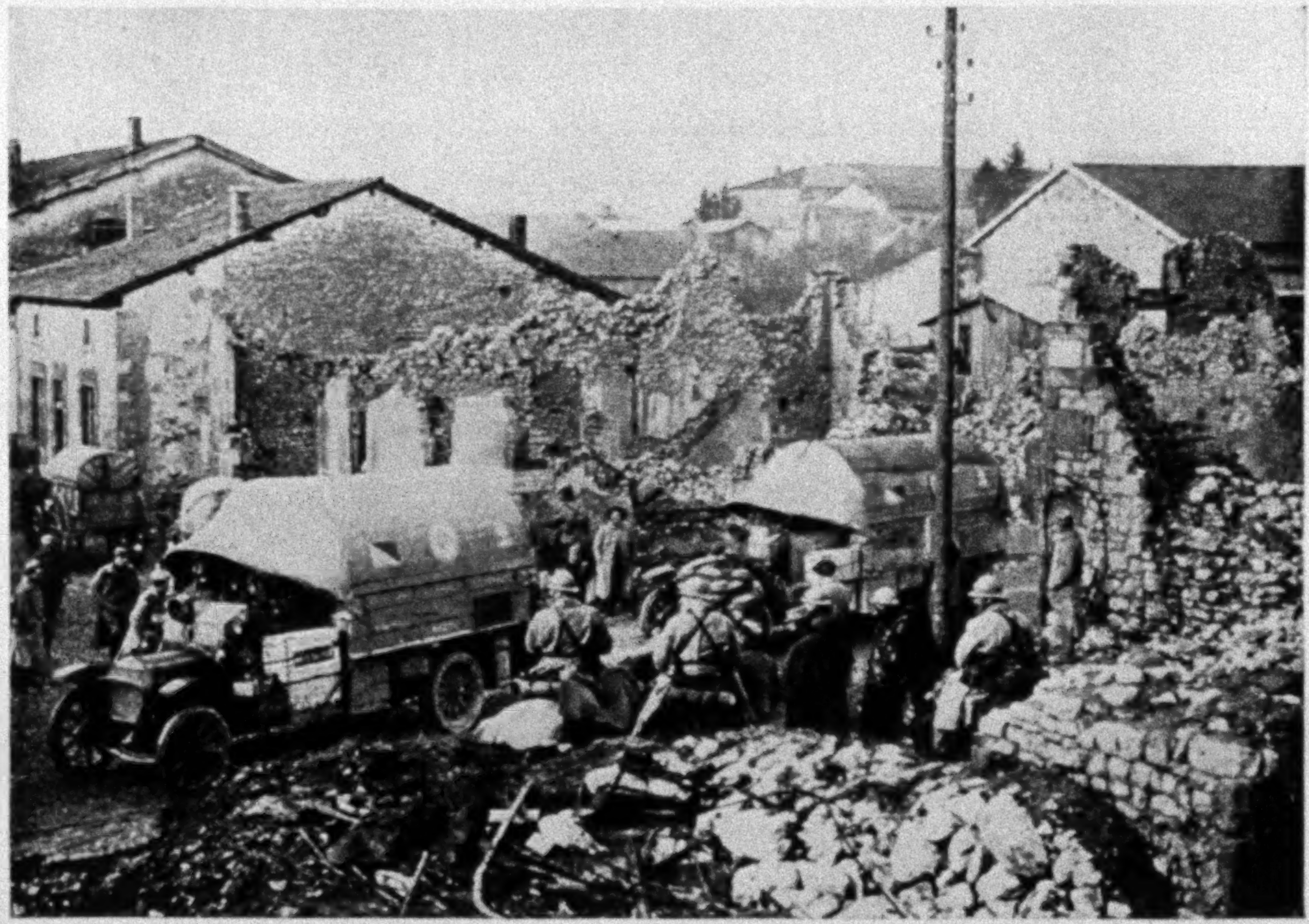
NO TIME TO COUNT THE COST

What is that going to cost us? We must not count the cost, though that cost will be terrific. It has already overwhelmed the nations of Europe. The blood and the travail of Europe thus far, terrible as it has been, may be justified by the birth of a great nation, the United States of Russia, and I pray God devoutly that the last stages of this war, terrible as they are going to be, awful as will be the cost, may be justified by the birth of another great nation, the United States of Germany!

It devolves upon this great organization, the American Red Cross, first to heal the suffering of the combatants, first to look after our soldiers and to help the soldiers of our allies.

But after that, do not let us forget our duty to the innocent victims in this war, because after this war the nations that have been belligerents and engaged in the war are going to be so seriously crippled that they will have to give all their strength to recuperation. They cannot give to their people.

It is going to devolve upon this nation to go in there, remembering our duty, remembering the fate of Belgium and Poland, to resuscitate those people and give them hope and prove to them that there is a God in Heaven, and that liberty is worth any price!



Photograph from Brown Brothers

CONVOY OF TRUCKS PASSING THROUGH A WRECKED VILLAGE NEAR VERDUN

"Within a few months we should and will have in service an army of 1,000,000 and a navy of 150,000 men. These men must have our best. To prepare against their needs in advance will be a stupendous task which the Red Cross must undertake."

AMERICA'S DUTY

BY NEWTON D. BAKER, SECRETARY OF WAR

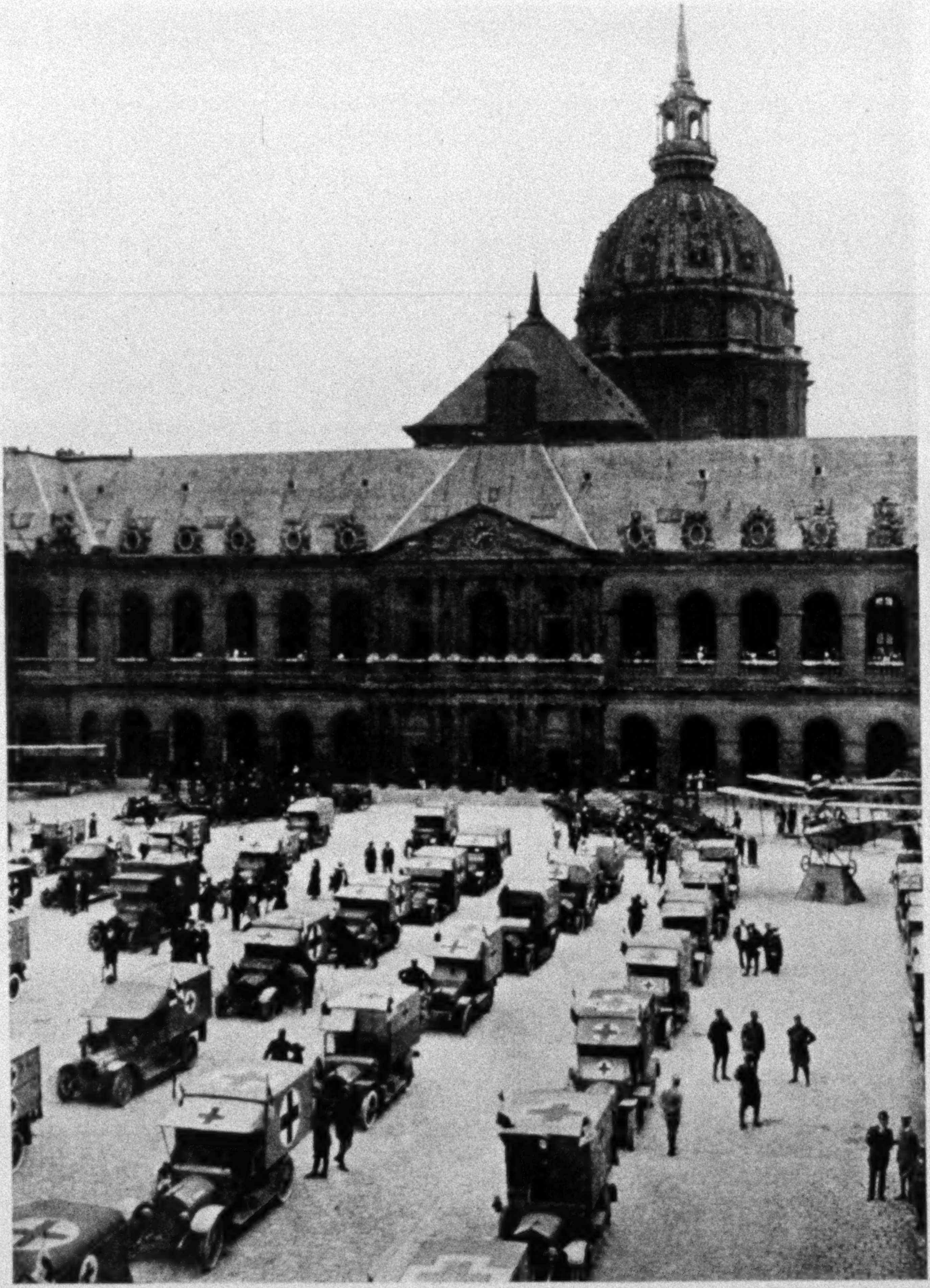
I SHALL not attempt to describe the size of our American duty beyond saying that the human race is a waif left to die unless we, as trustees, accept the task of rescuing it.

I suppose there has not been, since the very early times in human history, a war in which slaughter was so casual as it is in this. Of course, there has not been in recorded human history a war in which slaughter was so tremendous in its proportions as in this war.

I speak of its casual character because for a great many hundred years we have been progressing in the direction of limiting the horrors of war to the combatants, and that in this twentieth century we should revert to the casual slaughter of children, to the improvident slaughter of women, to the theory of warfare by the extermination of peoples, and to the use of weapons of war like starvation and disease—for both of them have become weapons of war—is an unthinkable reversion to a barbarous type which it was the hope of the intelligent that the world had outgrown.

TRAGIC FIGURES IN HISTORY

But, whatever the cause, the fact remains that the suffering of the people in these warring countries is more widespread, the desolation and devastation more complete, than ever before within the knowledge of living persons; and as this mode of warfare has not spared little persons, so it has not spared little nations.



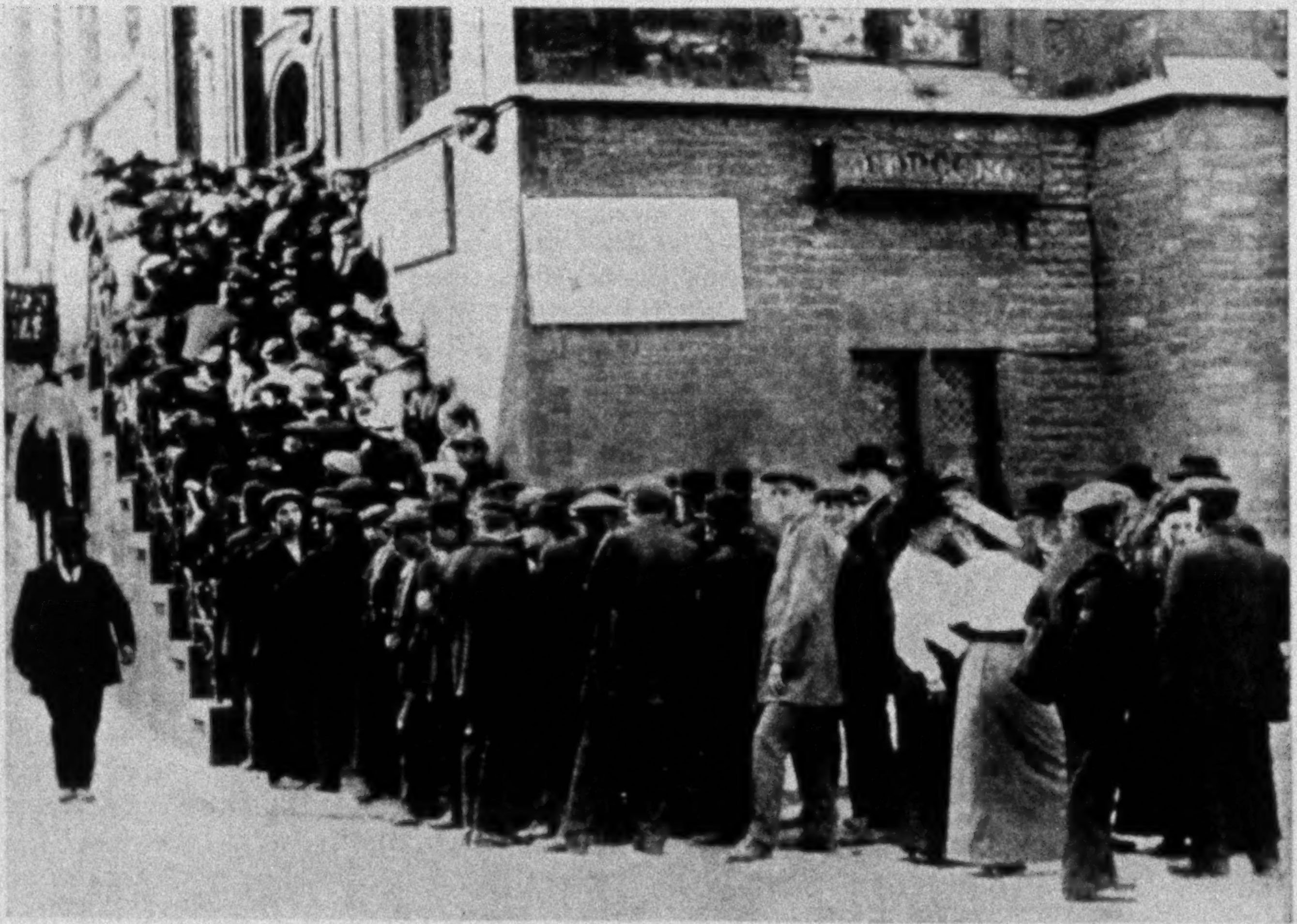
Photograph by Brown Brothers

AMBULANCE FLEET IN THE COURT OF HONOR, HOTEL DES INVALIDES: PARIS

"Just as the fighting manhood of the United States is soon to be in the trenches, so the Red Cross, which has done so much for the Allies in the past, is now eager to be mobilized in the allied Army of Mercy."

FRENCH WAR ORPHANS ON THEIR WAY TO CANNES, SOUTHERN FRANCE

Many of these children, made waifs by the world war, are assured a brighter future because they now have foster parents in America. Recently there has been organized in the United States a society each member of which assumes the financial responsibility for the care and maintenance of a particular child. Ten cents a day, or $36 a year, is all that is required to insure some innocent little war sufferer food and clothing.



Photograph by Paul Thompson

A BREAD LINE AT GHENT, BELGIUM

Our government is now advancing $7,500,000 monthly to Belgium to help feed these lines

Photograph from Harriet Chalmers Adams

BANDAGING A WOUNDED DOG

In Flanders they still "Cry 'Havoc' and let slip the dogs of war." But the dogs follow after the havoc and are not party to it. With a heroism that makes them akin to their masters, these gallant animals carry succor to the helpless and the dying who lie in no-man's land between the trenches. Heartless indeed must be the sharpshooter who can make a target of one of these dumb messengers of mercy.

I suppose that when this war comes to be written as an epic—and it will some day be written as an epic of the folly of mankind—the tragic figures in it that will persist in the imagination and memory of mankind forever will be countries like Belgium and Roumania and Poland.

America's duty! We are separated from the actual scene of this conflict by thousands of miles of sea. Our losses in it have as yet been minor. We are entering the war in the firm belief and purpose of ending it in a victory for right, and we have not the slightest intention of stopping until that victory is achieved!

Mad as the world seems to be, some day there will be reëstablished on this stricken planet a peace which will be just and wise and permanent—just in proportion as America pours out her spiritual resources in the waging of the war from now on and is heard at the conference table to challenge the attention of mankind to the beauty of righteousness among nations!

But in the meantime, as the armies which are being called are trained and are led to battle, all along the national wayside of every nation in the world still crouch the terrified and trampled figures of the children of mankind—disowned, starving, and dying.

HORRORS THAT MAKE THE STOUTEST HEARTS QUAIL

There is no limit to it, and I shall not undertake to harrow your feelings—in fact, I am not certain that I could command myself to repeat intimate letters which I have seen within the last day or two about Roumania.

But the call is limitless and it is going to be made known to the hearts of the people of the United States, and we are going to endeavor to respond to this cry of distress. The President has urged that the Red Cross be made the vehicle of our response.

Organization for any task is the more important as the task becomes larger and more serious. It requires no organization to allow one of us as an individual to buy a dinner for a hungry man. But it requires a very high degree of organization effectively and economically and wisely to administer the charities of a city. It requires a very much higher degree of organization and coördination to make effective the philanthropies of a nation.

By that same token it requires the highest degree of organization, of concentration and consecration of purpose, the most careful coöperation, the most willing harmony, the utmost centralization of effort, to deal with the woes of a world.

And so, in the interest of making effective our generous impulses, in the interest of saving just as many as we can—facing an impossible task in size, and yet seeking to save life and alleviate pain and suffering just as far as we can—the concentration of our efforts through the Red Cross, which has both a national and an international status and is managed and conducted by men of large affairs and great experience with this sort of thing, seems to be essentially demanded.

I think if anybody would ask me how much he ought to give to the Red Cross at this time I would say, "All you have." That is a counsel of perfection, I know, but then it would not be enough.

I understand the War Council has set itself the task of raising one hundred million dollars.

GIVE TILL YOU FEEL IT

That may sound to some like a large amount, and yet this war is costing in actual money every day from sixty to seventy millions of dollars, and in human life from ten to fifteen thousand of those who are killed in actual warfare, without counting those who starve and die of disease.

The Red Cross of the United States of America has set itself the great task of raising for, one might say, cosmic philanthropy a sum equal to the destruction which the war entails in a day.

I cannot further describe the size of this task. I am very happy to repeat the admonition of the President of the United States to the people that they centralize their energies. Let us have as little lost motion as possible about this great enterprise, and center our activities in this national and international agency. The response which we ought to make ought to be limited only by the extent to which our sympathy, enlightened by knowledge and stirred by imagination, and then overstepping rather than understepping the mark, will enable us to make sacrifices for the greatest need the world has ever known!

STAND BY THE SOLDIER

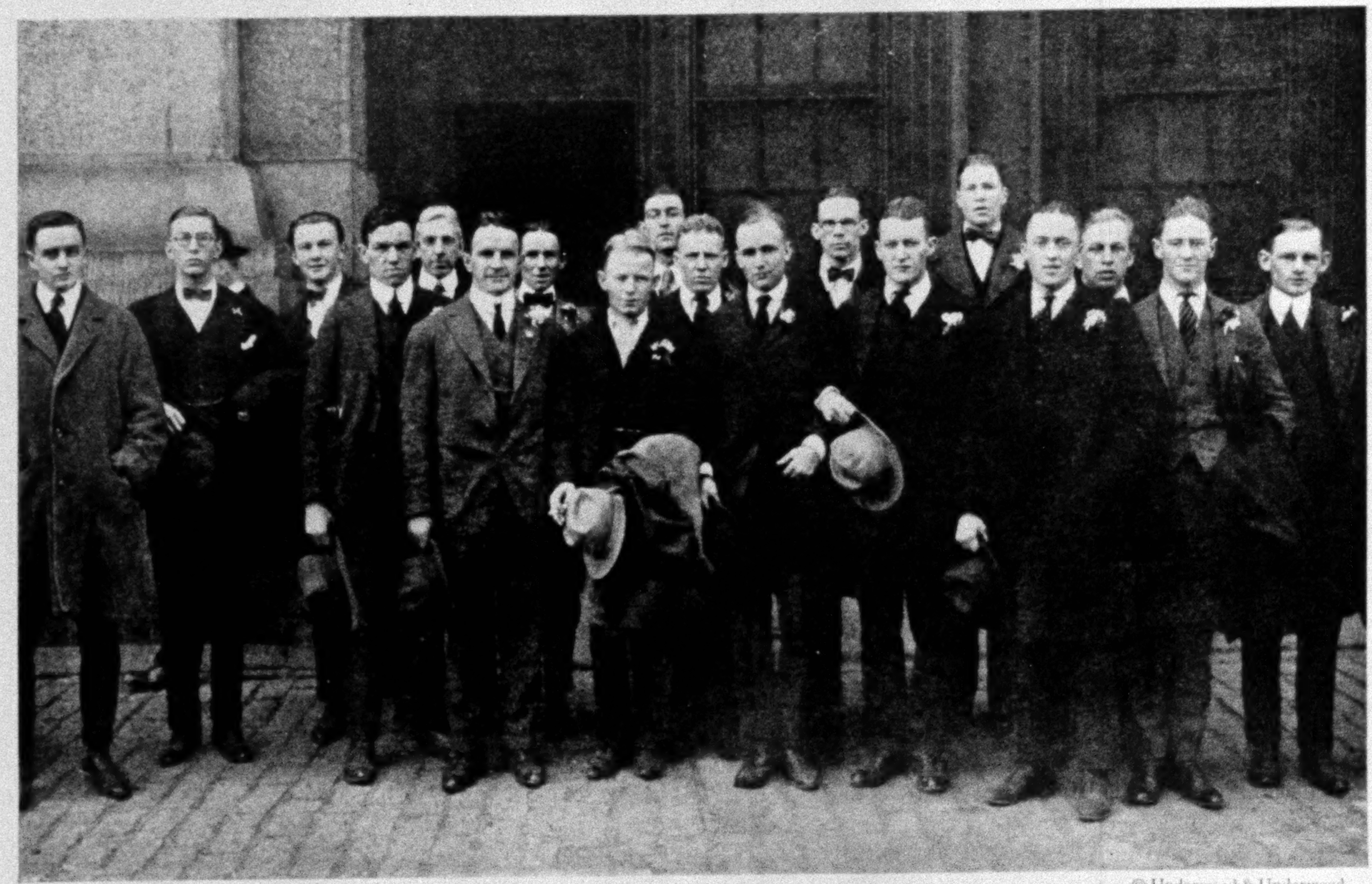
By Major General John J. Pershing, U. S. Army

I HAVE been requested by some of the officers of the Red Cross to say a word as to the part that organization played in our little expedition into Mexico.

Just before Christmas, an official of the Red Cross wrote me a note and asked me what the Red Cross could do for the men in Mexico.

There was not anything that we really needed, but her idea was to arouse a little enthusiasm among the members of the Red Cross by encouraging them to work for our own people; so I telegraphed her a list of things that I thought might be acceptable as Christmas presents, including cigarettes, cigarette papers, smoking tobacco, pipes, old-fashioned candy, comfort bags, bandanna handkerchiefs, pocket-knives, and perhaps a dozen articles, thinking that she would select from these some one thing to give to each man.

But she took the telegram literally, and sent word around to the various chapters



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ANDOVER ACADEMY RED CROSS UNIT OFF FOR FRANCE

These young college men, who recently sailed for Europe to do their bit in the war for liberty, will drive ambulances and do other yeomen tasks under the direction of the Red Cross in Flanders. The universities and colleges throughout the country will supply the United States Army Ambulance Corps with 1,500 picked men for service abroad. These splendid sanitary units are not to be held back until American troops reach the front, but are to be utilized by the French Government until the arrival of our own soldiers. Many young faculty members are being enrolled in this service with student bodies from California to Maine and Texas.

throughout the country, and prepared not only a comfort bag, but a comfort bag containing each and every one of those articles for each man in the division.

We arranged a Christmas tree and had various Christmas celebrations at the various camps, and those presents were distributed.

MAKE THE SOLDIERS FEEL YOU'RE BACK OF THEM

The point I wish to make is that those things cause the soldier to remember that the people at home are behind him. You do not know how much that is going to mean to us who are going abroad. You do not know how much that means to any soldier who is over there carrying the flag for his country. That is the point which should be uppermost in the minds of those who are working for the soldier.

The great work, however, for this Red Cross is to help our allies. As I understand it, the people in France need supplies of all kinds. Therefore, it is our first duty to help them rehabilitate themselves.

We must help their orphans and their widows. We must help put them in a position to produce. We must help them in every way to relieve the French nation from the drain upon it which will, in turn, be a drain upon its military resources.

Our people have not begun to realize that we are in this great war. It is all very well to write newspaper editorials about it and to talk about it on the platform; but it has not yet been impressed upon the people everywhere.

I have just come from a county where they talk to you and say, "Oh, well, we haven't lost anybody; none of our vessels has been destroyed, and we do not really feel that we are at war."

I put this question to all such men: "Now that we are in this war, do you realize that we must take the place of every man that is killed among the Allies, that we must support the widows and orphans? If we do not, who will do it?"

The representatives of business interests are the men to start this enterprise among our people and bring them to a full realization of the very grave seriousness of this war, to make them feel that we are in this war to win, and the probability is that our entering this war is going to be the deciding factor, and that the burden of the success is going to rest upon the United States.

A POISONED WORLD

By William Howard Taft

Ex-President of the United States

A REVIEW of the dreadful horror of this war brings back to one the attitude of mind of many good people in the outset of the war, who wrote communications and expressed themselves orally to the effect that this had shaken their faith in the existence of a God; that it could not be that a good God would permit the horror and agony of spirit of his children such as we saw before our eyes.

The war goes on. There has, it seems to me, developed in the war some evidence of the divine plan of eliminating from the family of nations a conspiracy to put the world under the heel of a ruthless philosophy of military force to take away the liberty of mankind.

If you will study the history of Germany for the last half century, you will see that conspiracy disclosing itself more and more clearly.

The doctrine preached openly in the philosophy of that country was that there is no international morality; that there is no rule by which a nation may be governed except that of self-preservation, as it is called, which means self-exploitation

WOUNDED GOING TO THE AMBULANCE

The work of the American Red Cross "everywhere in France" has served to seal the bond of fraternity between the two nations more closely than any other agency since the beginning of the war. From this time forth the red badge of courage and compassion will be worn by those who must minister to our own wounded as well as to our brother allies in arms.

over the ruins of other civilizations and other peoples and other nations.

THE MINDS OF A PEOPLE POISONED

So deftly has that conspiracy been carried on that the minds of a great people—a people that have demonstrated their greatness in many fields—even in that fifty years, have been poisoned into the conviction that it is their highest duty to subordinate every consideration of humanity to the exaltation and the development of military force, so that by that force they can take from the rest of the world what is needed to accomplish their destiny, at whatever cost of honor or principle.

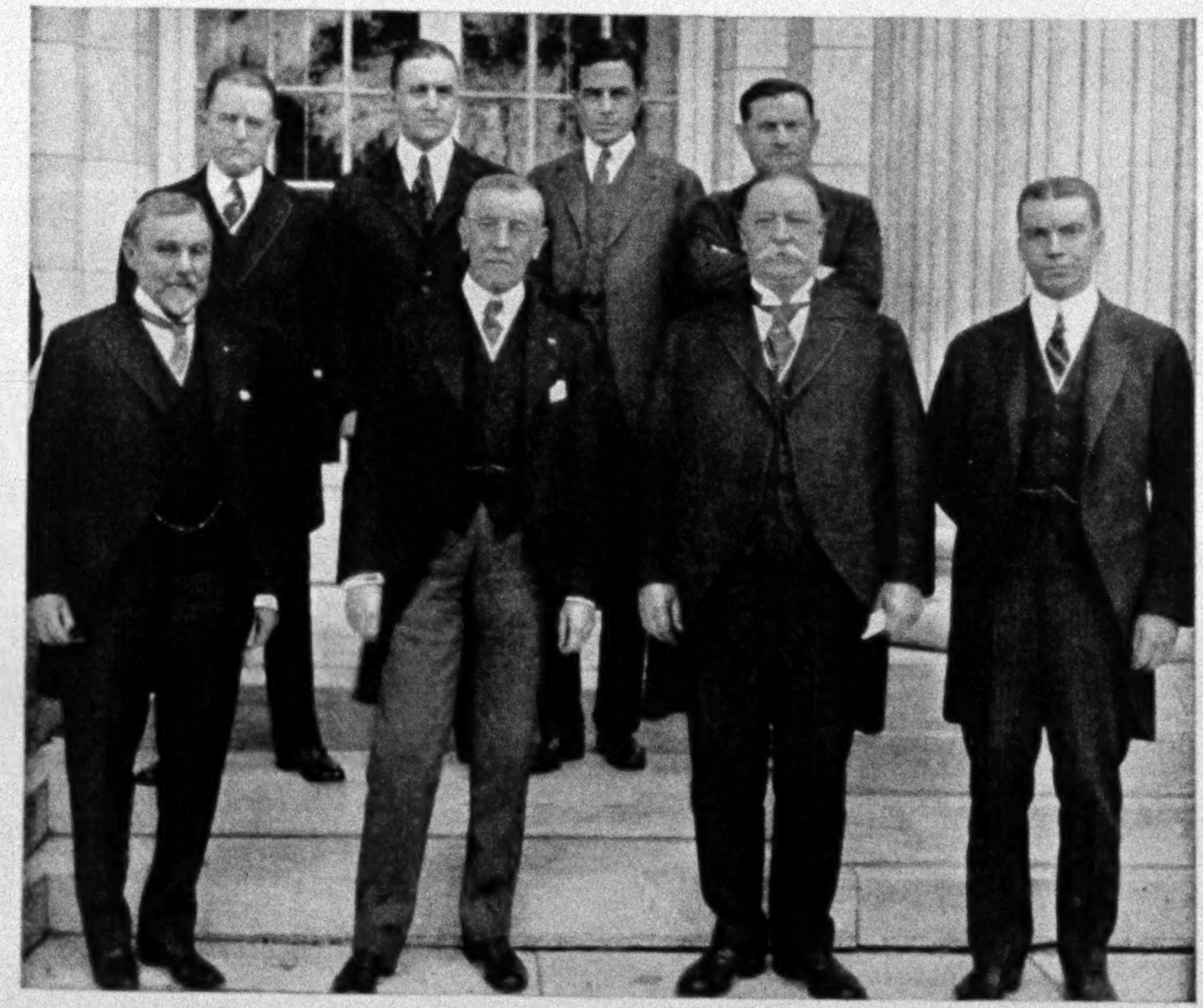
I yield to no man in my admiration for most of the qualities or all of the qualities of the German people *except* this obsession that they have been given through the instilling of that poison in the last fifty years.

Where do you see the working out of the divine plan? That was a cancer in the world. It had grown to be so formidable that it needed a capital operation to excise it and restore the world again to the station in the development of Christian civilization which, but for that, we would not have reached.

So we have seen it in the destruction of the greatest autocracy, perhaps—at least apparently the greatest autocracy—Russia, whose alliance with the Entente Allies gave for the time the lie or apparently gave the lie to the proposal that they were fighting the cause of freedom, fighting the cause of freedom against absolutism.

That toppled over, and now we have arrayed on the one side the democracies of the world against the military autocracies on the other, and the issue has been clearly drawn so that it may be seen by the wayfaring man, though a fool.

Accompanying this devotion to military efficiency, as a God, has come that blindness which is in the end to destroy the Hohenzollern philosophy of government.



OFFICERS AND WAR COUNCIL OF THE AMERICAN RED CROSS

Left to right, front row, Robert W. De Forest, vice-president; Woodrow Wilson, President of the Red Cross; former President William H. Taft, chairman of the executive committee; Eliot Wadsworth, acting chairman. In the back row are Henry P. Davison, chairman of the War Council; Grayson P. Murphy, Charles D. Norton, and Edward N. Hurley, all members of the War Council. Cornelius N. Bliss, Jr., the only other member of the council, was not present.

After two and a half years of struggle that has tested the endurance nearly to the breaking point of the great nations engaged, Germany, in that confidence that she has in the science of warfare, has said: "We will starve England into submission and we will end the war," and in the accomplishment of that she forced, because she had to force, into the ranks of her enemies, at a time when this war is to be determined by money, by resources, and by men, the nation that can furnish more money, more resources, more equipment, and more men than any nation in the world!

And now, my friends, do not let us minimize the task we have before us. We Americans are a good people—we admit it; but one of our weaknesses is an assumption, justified by a good many things that have saved us from egregious mistakes in the past, that God looks after children, drunken men, and the United States!

We have got beyond that reliance—I do not know whether we have or not, but we are going to get beyond that reliance. Germany is not exhausted. She is, by reason of this system of fifty years standing, the greatest military nation that ever was organized, and she still has great fighting power; and she arrayed ourselves as her enemies because, with that devotion to system, with that failure to understand the influence of moral force in a people, she was contemptuous of what we, who had ignored military preparation, could do in this war.

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HANDS THAT ARE QUICK TO HEAL

Like this mother and daughter, many Americans, who are now serving in the ranks of Red Cross workers in France, had never known hardship or privation until they volunteered to assume the responsibilities of war service, in order that they might mitigate the suffering of the men who actually bear the brunt of battle.

She has now made an egregious error, as it is for us to show. When we went into this war there were a good many people that thought all we had to do was to draw a check or several checks for a billion dollars, and that "George" would do the fighting.

THE FRUIT OF GERMANY'S CONTEMPT

That is not the case. One of the things which has happened ought to give us the greatest hope and satisfaction. It is largely due to the gentleman who has just addressed us, the Secretary of War, and the President of this administration.

We have begun right in the raising of an army, and that is one thing gained. We have provided for a million or perhaps a million and a half of men. That probably will not be enough.

A great deal better that we should make overpreparation in a matter in which the whole welfare of the world is engaged than that we should make underpreparation!

What has been said I only wish to repeat, and that is, while we can intellectually, perhaps, visualize the war, if we sit down to think about it, we do not in our hearts feel it yet. It is something apart from us.

I read the other day, as doubtless you

Photograph by Brown Brothers

NO SURCEASE FROM LABORS OF LOVE

Even a Red Cross nurse has an occasional respite from toil; but so eager is the spirit of help that during moments of recreation the hands that are accustomed to binding wounds and ministering to the suffering are employed at knitting.

read, "Mr. Britling Sees It Through," and studied the psychological development of the coming of the war to him. That is what we have got to have.

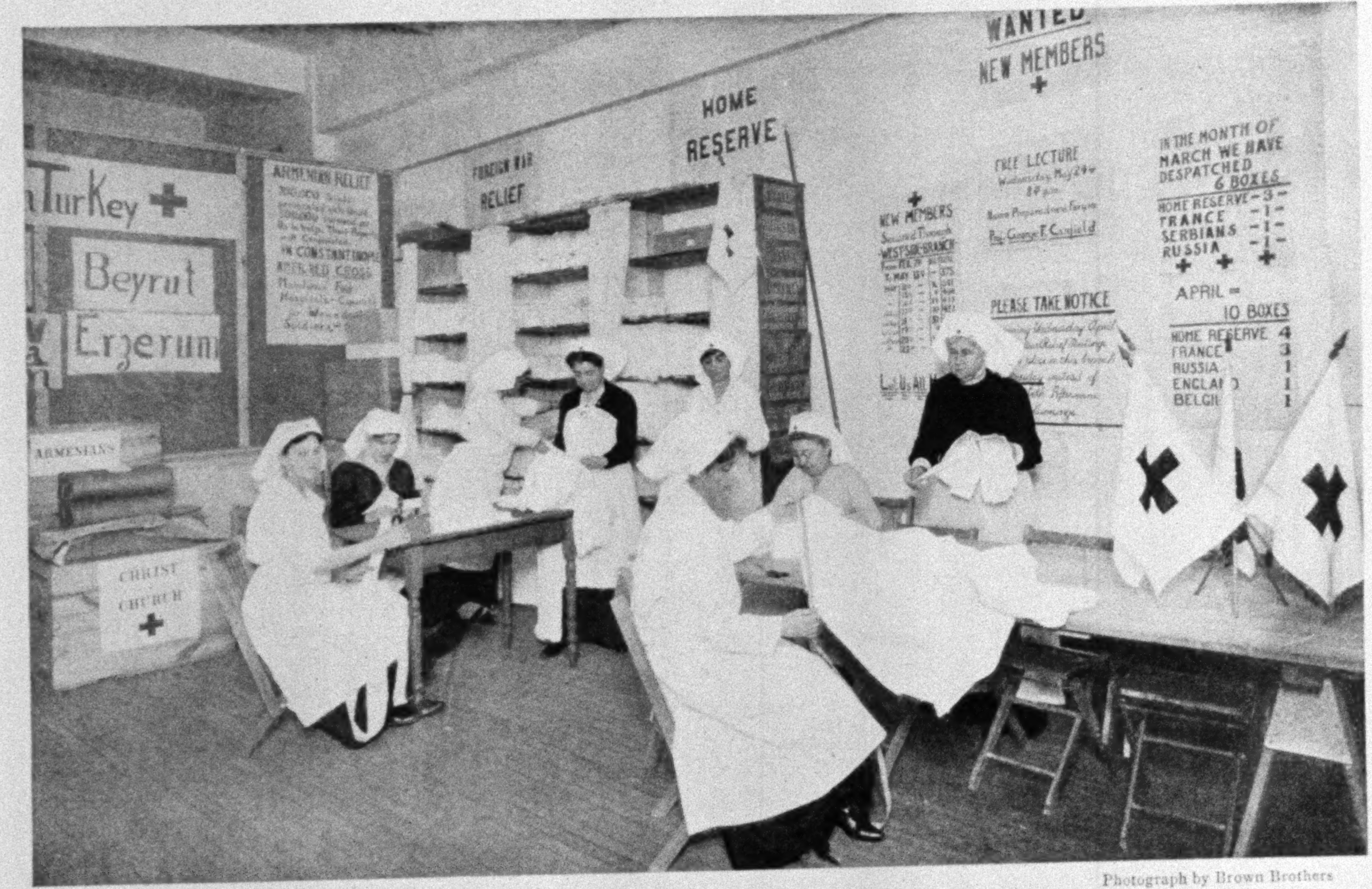
SOON WE'LL REALIZE WE'RE AT WAR

We shall not realize what the war is until our men, those beloved by us, have been exposed to the dreadful dangers, to the character of wounding that is so horrible under this modern system of warfare, and until we all go to the bulletins and study the names to see whether those who are near and dear to us have been taken for their country's sake.

Then the war will come in to us. Then there will be nothing but the war and everything else will be incidental; and until that psychological change has come, we shall not feel the whole measure of our duty as we must feel in order to carry this war through.

The Red Cross is the only recognized agency through which we may help to take care of the wounded of the armies and the nations that are fighting our battles.

It is an admirable arrangement that some such avenue as that should be supplied to give vent to the patriotic desire


Turkey
Beyrut
Erzerum
ARMENIAN RELIEF
IN CONSTANTINOPLE
ARMENIANS
CHRIST CHURCH
FOREIGN WAR RELIEF
HOME RESERVE
WANTED NEW MEMBERS
NEW MEMBERS
FREE LECTURE
PLEASE TAKE NOTICE
IN THE MONTH OF MARCH WE HAVE DESPATCHED 6 BOXES
HOME RESERVE -3-
FRANCE -1-
SERBIANS -1-
RUSSIA -1-
APRIL = 10 BOXES
HOME RESERVE 4
FRANCE 3
RUSSIA 1
ENGLAND 1
BELGIUM 1

Photograph by Brown Brothers

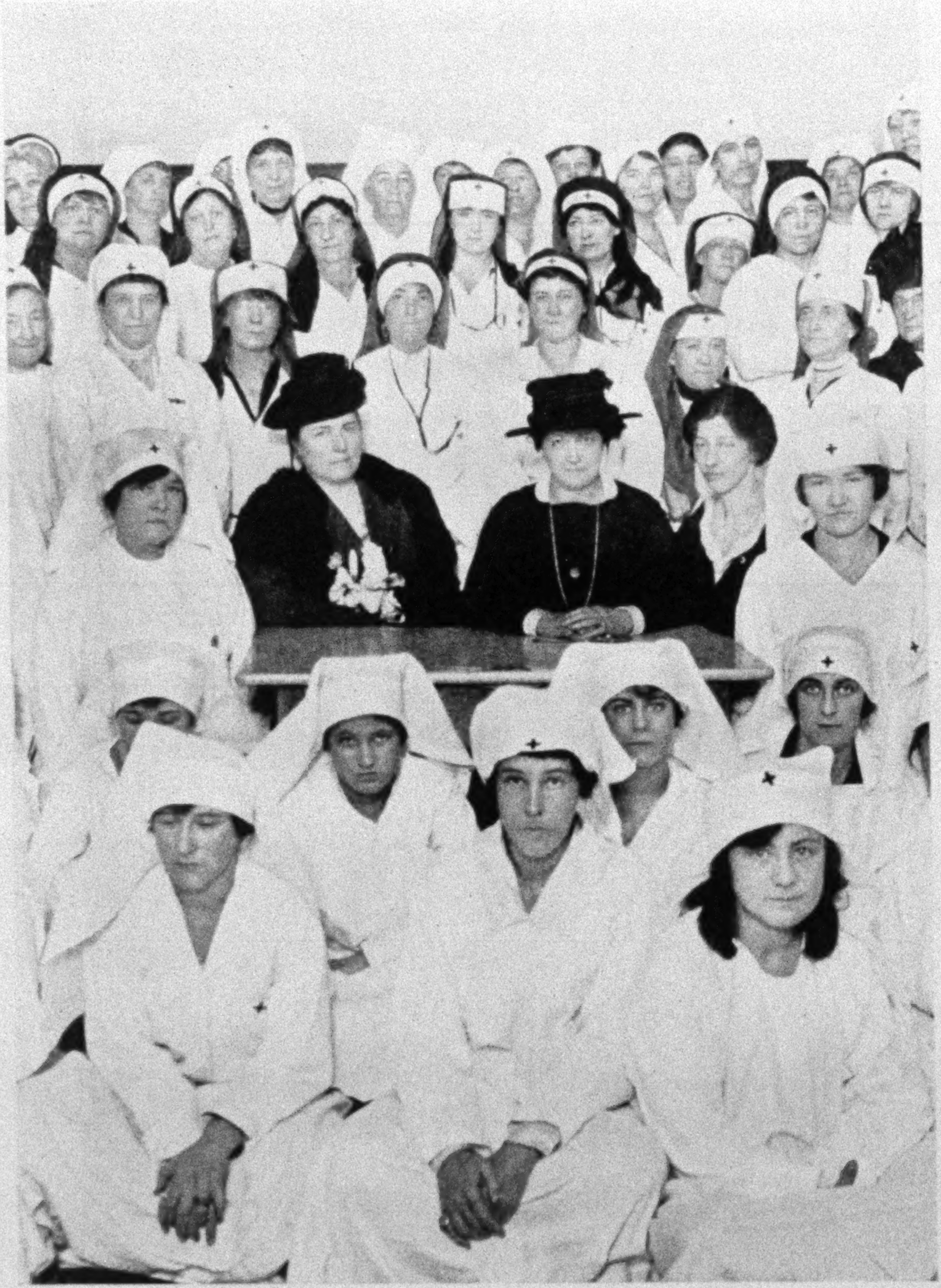
A RED CROSS CHAPTER IN NEW YORK CITY

Not only in the large cities, but in every hamlet of America women are organizing, under competent instruction, to make bandages and gather supplies for early shipment to all the battle fronts of the world

Photograph from Brown Brothers

HOURS OF PLAY NOW CONSECRATED TO HUMAN SERVICE

In woodland camps, in parks, and in places once known as "pleasure resorts" eager hands, inspired by earnest hearts, are busy making bandages and preparing other Red Cross supplies which will be needed by our soldiers and their allies during the coming months of sacrifice.



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A GROUP OF WORKERS AT THE NEW YORK HEADQUARTERS OF THE AMERICAN RED CROSS of those who cannot go to the front, to help in behalf of their country and the world. Every country has a Red Cross, and every country must have it, because no army can furnish the instrumentalities adequate to meet the proportion of wounded that this war furnishes.

SIX MILLION BEDS OF PAIN

Think of it! Forty million at the colors, seven million dead, six million on beds of pain, and the whole of Europe taken up with hostilities!

You cannot exaggerate the function that our Red Cross will have to perform merely in attending to the wounded of our army and other armies in carrying on this fight. Therefore, one hundred million dollars, great as the sum seems, is inadequate; but the first hundred million dollars will be the hardest hundred million to raise!

And we must leave no doubt about it. I thank God that the organization is in such competent hands to do the great work that has to be done.

And now, my friends, the one thing for which we ought to be grateful is that in this great war, in this war in which we shall have to make sacrifices—oh, such sacrifices, so great that they wring tears from us as we think of them—we should be grateful that we have a cause worthy of all the sacrifices that we can make!

THE RED CROSS SPIRIT

By Eliot Wadsworth

IT IS a most satisfactory fact that the Red Cross was able to call into the field and send to Europe the first actual help that we have extended to our allies, in the form of those six base hospital units which were called and sailed. Inside of three weeks the whole six units were on the water going to Europe, where they will take over existing hospitals and relieve the overworked staffs who have been struggling with their problem of caring for the wounded for nearly the last three years.

SACRIFICES THAT COUNT

The sacrifice these people make who go, particularly the doctors, is one that we cannot forget. When a busy doctor answers the call, such as Dr. Brewer in New York, it is something we should never forget. Dr. Brewer received his telegram that he was to go.

He was here the next morning to make the arrangements, and I met him, talked with him a minute, and he said: "My house is to rent. I have performed my last operation in this country. I am going to use every bit of my time from now on to enlist the balance of the personnel, getting my uniforms, and getting the men ready and everything in good order so that we can go."

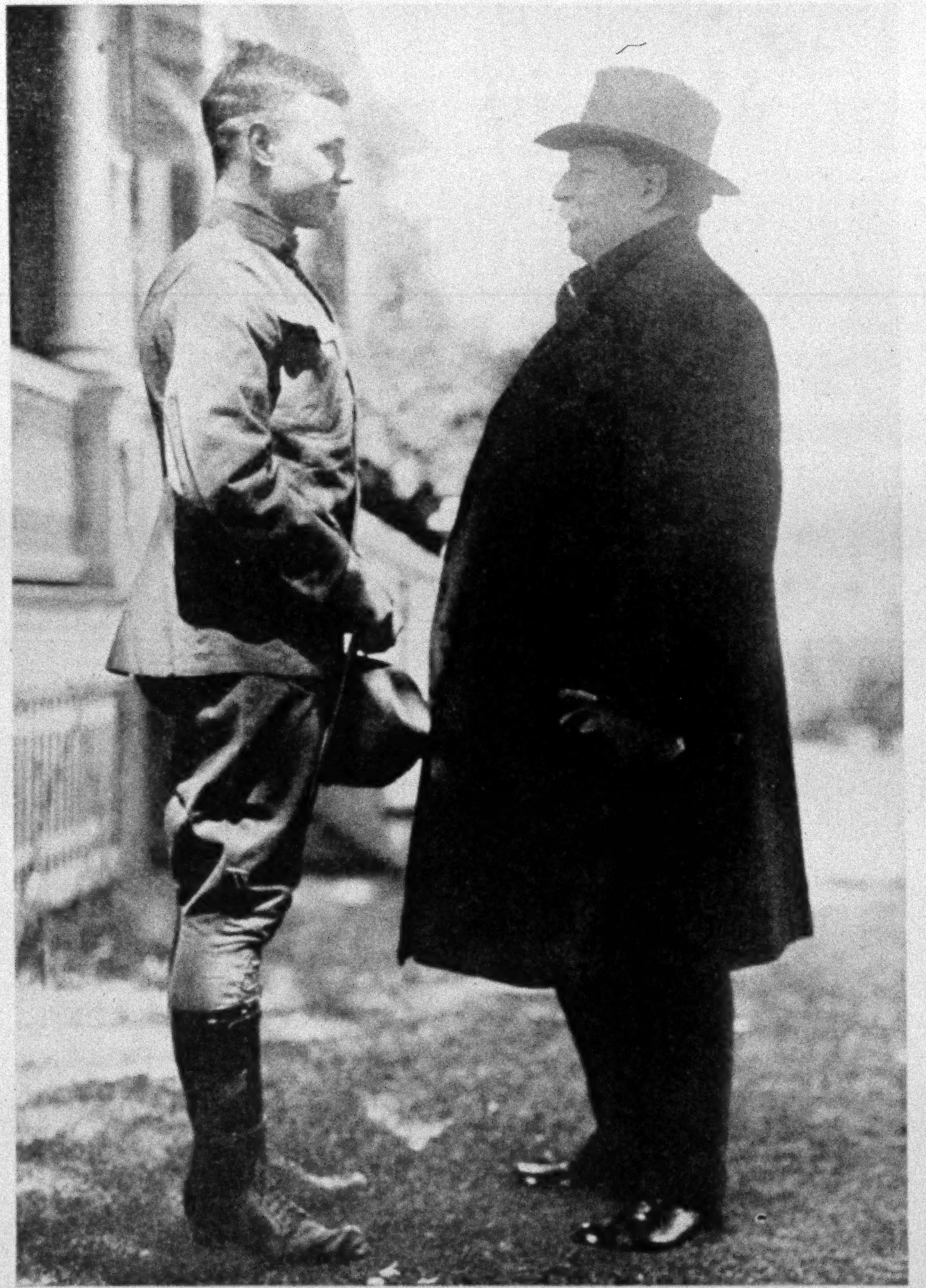
Such a sacrifice by a busy doctor, with a tremendous practice, cannot be measured in money. Any business man could afford to give a check for a year's income and be allowed to stay at home and go on with his business far better than any one of those doctors can afford to go over there and practically disappear from view for how long he does not know; it may be six months, it may be a year, it may be five years.

Not a single one of them begged off. They all went, unless there was some very pressing family reason, such as a serious illness, and in all cases they expressed a desire to go just as soon as they could possibly get away.

A HUNDRED PER CENT OF GIVERS

It is a tremendous power for good that is now spread in every hamlet, in every cross-roads in the country. It is in guiding that power and giving it something to do, in pointing out ways in which it can help more and more as the war goes on, that the headquarters has been occupied.

The Red Cross of this country has a problem that no Red Cross has ever had



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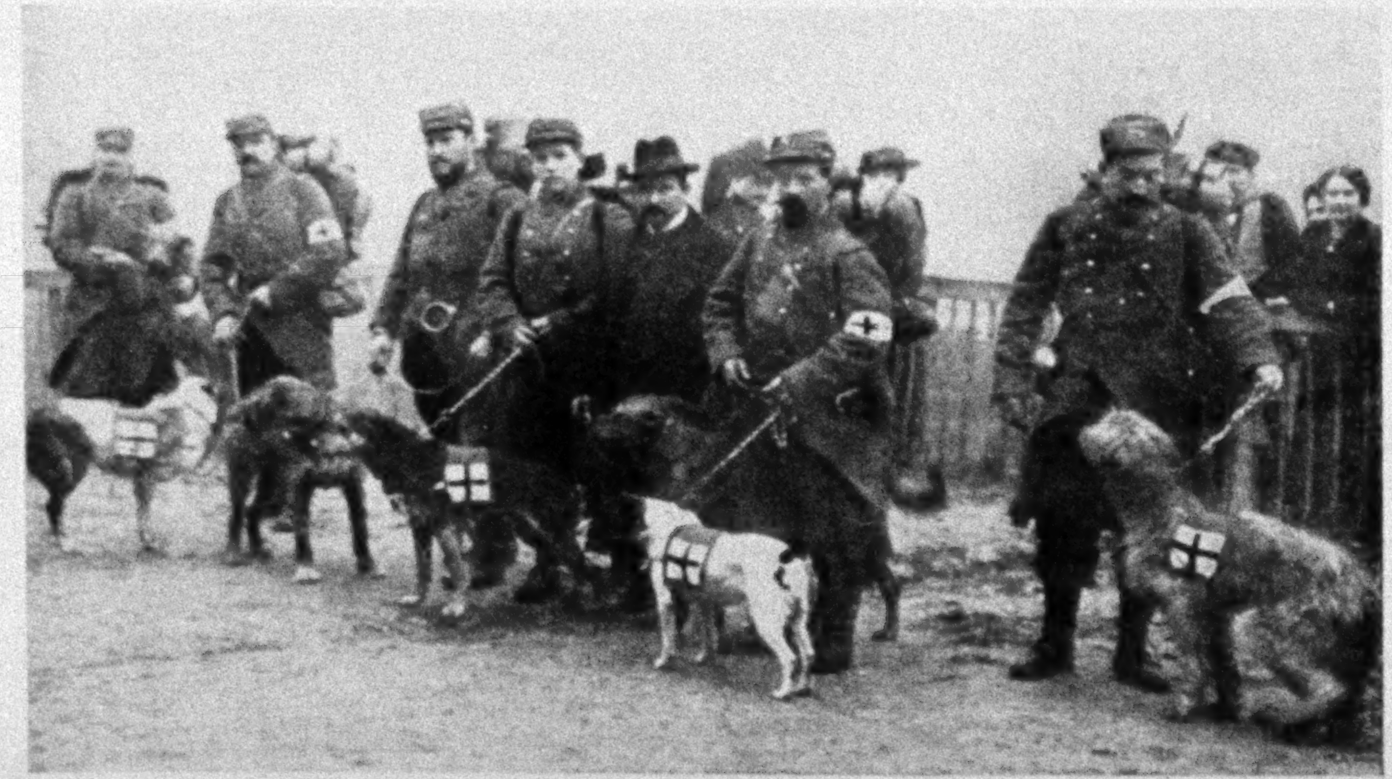
"UNITED WE STAND, DIVIDED WE FALL"

An illustration of the true American democracy which in times of stress swings every man into line for our country and the cause of liberty! The former Commander-in-Chief of the United States Army and Navy measuring up with his son, who decided to try to come up through the ranks and enlisted as a private in the field artillery.



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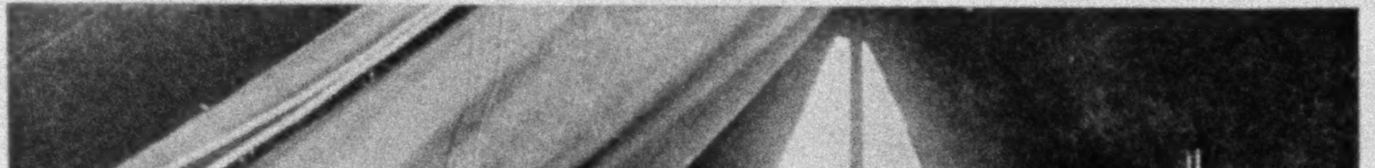
A SQUADRON OF FRENCH RED CROSS DOGS LEAVING PARIS

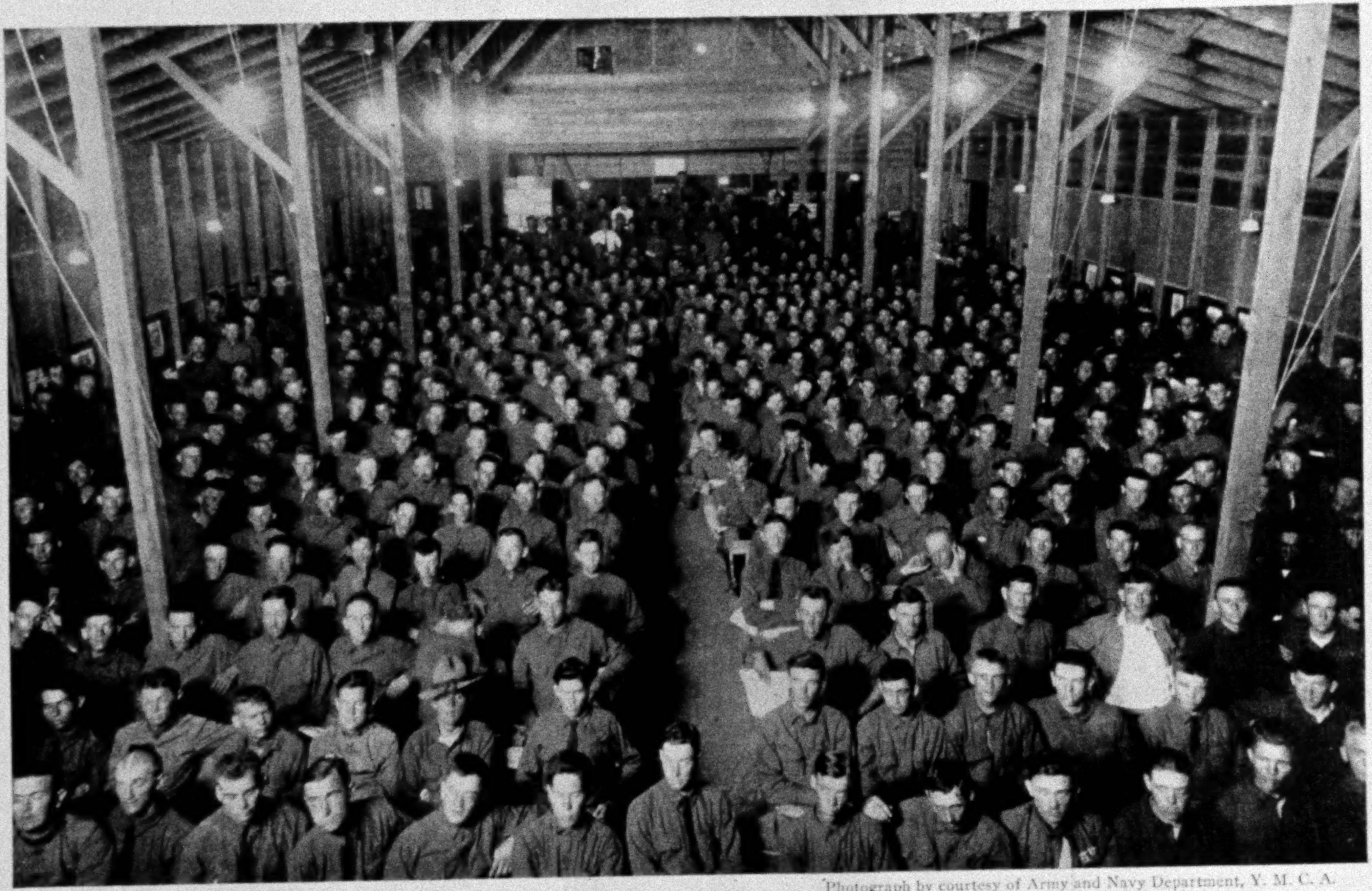
The Belgian police dogs, on account of their ability to detect and capture criminals, and the great St. Bernards, which were famous for their rescues of travelers lost in the Alpine snows, were considered the greatest heroes of the canine world until the present war introduced the Red Cross dogs, whose deeds of valor in front of the front-line trenches have saved the lives of thousands of sorely wounded.



Photograph from Brown Brothers

AN X-RAY TENT IN A BASE HOSPITAL OF THE RED CROSS

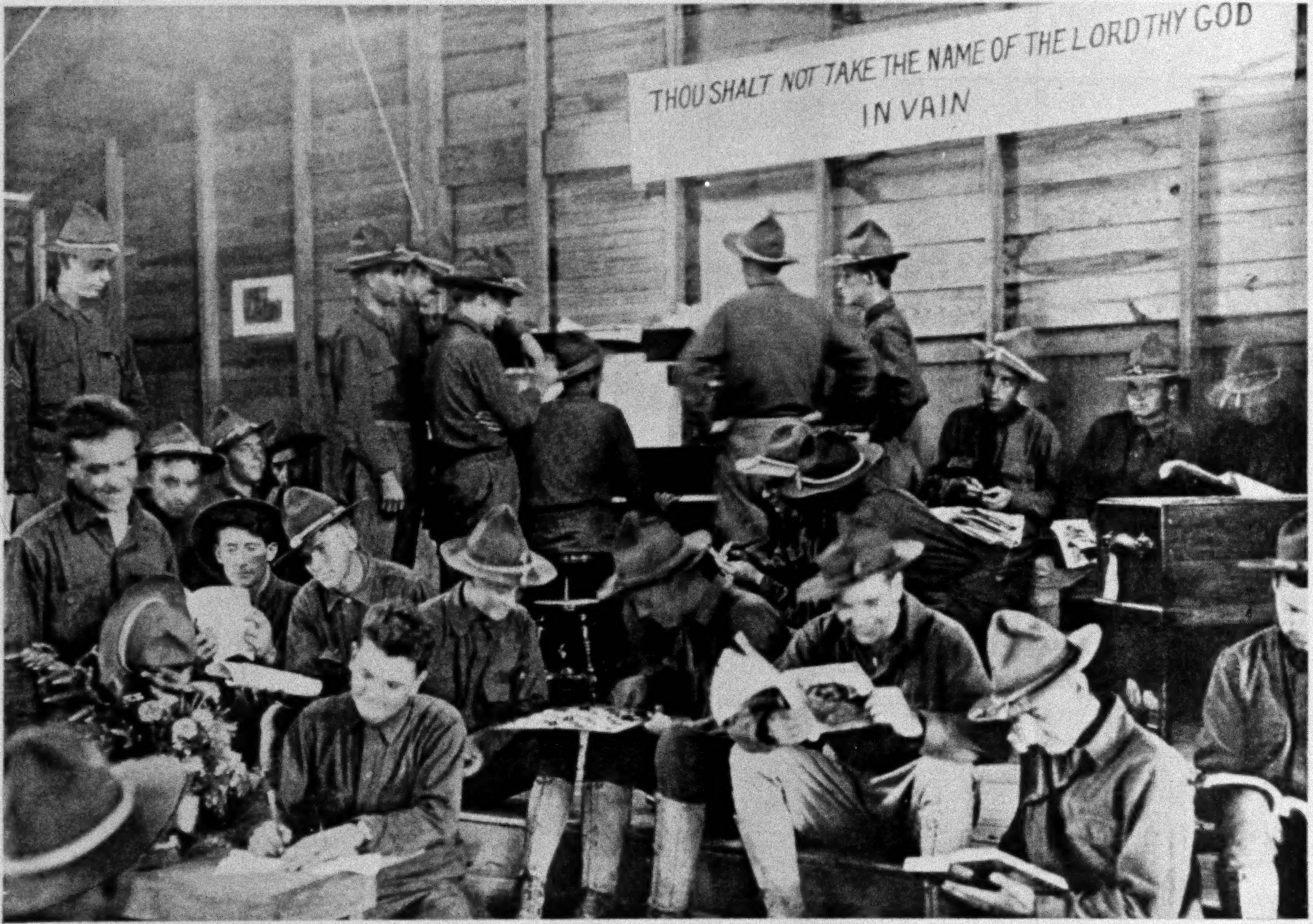
By means of these powerful rays the physician can see right through the human body, watch the beating of the heart, etc., and discover interior fractures or fragments of shell



Photograph by courtesy of Army and Navy Department, Y. M. C. A.

YOUNG MEN'S CHRISTIAN ASSOCIATION RELIGIOUS SERVICE IN AN ARMY CAMP

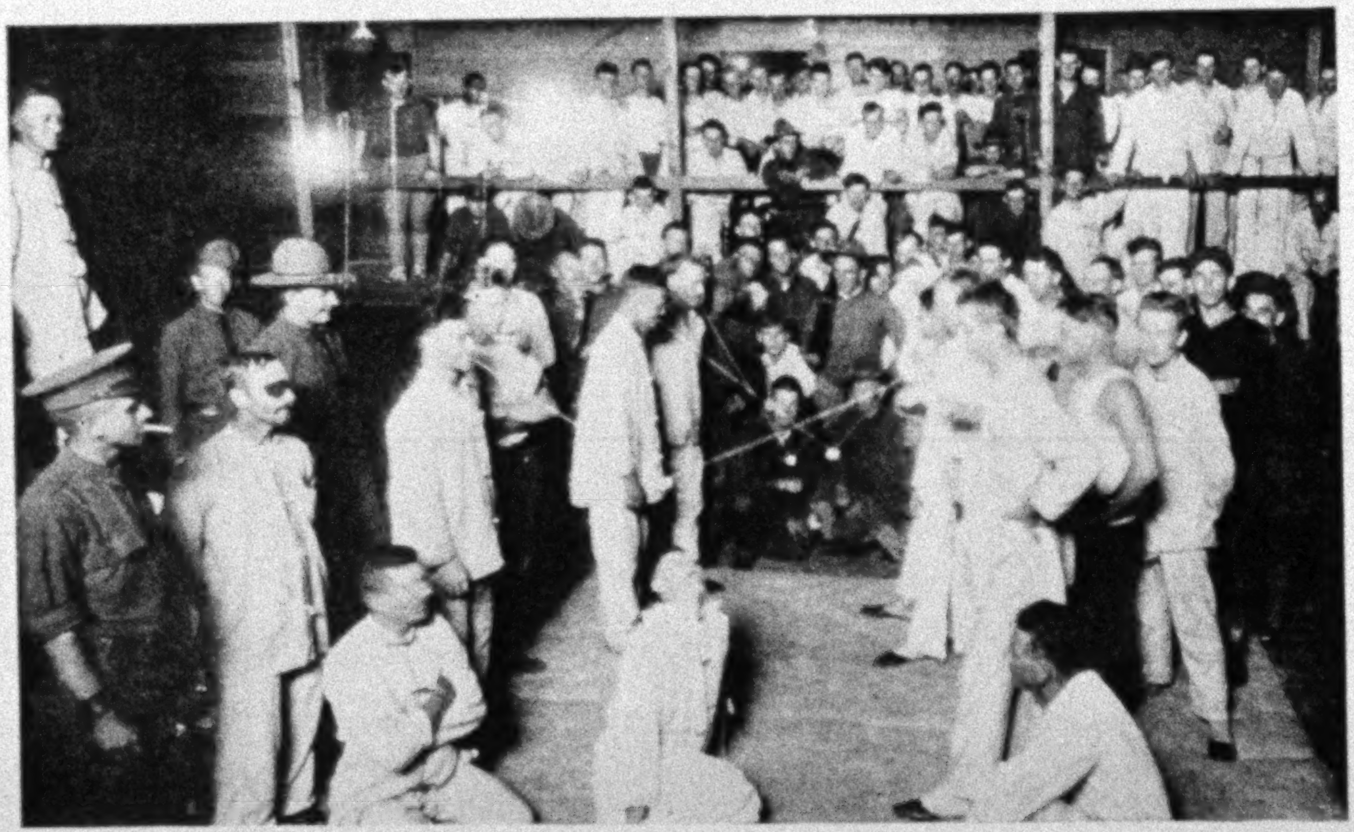
No army was ever sent into battle actuated by higher principles of righteousness, justice, and mercy than that which America is sending to Europe. In its work behind the lines the Y. M. C. A. will help to keep these principles fresh in the hearts of the men who are fighting for humanity, not for lust of power or pride of place.


THOU SHALT NOT TAKE THE NAME OF THE LORD THY GOD
IN VAIN

Photograph by courtesy of Army and Navy Department, Y. M. C. A.

A MILITARY CAMP, LIBRARY, MUSIC ROOM, AND TABERNACLE OF THE Y. M. C. A.

"Our American soldiers must have a home in France—somewhere to rest, somewhere to find a friendly atmosphere, somewhere to go for recreation and wholesome amusement"

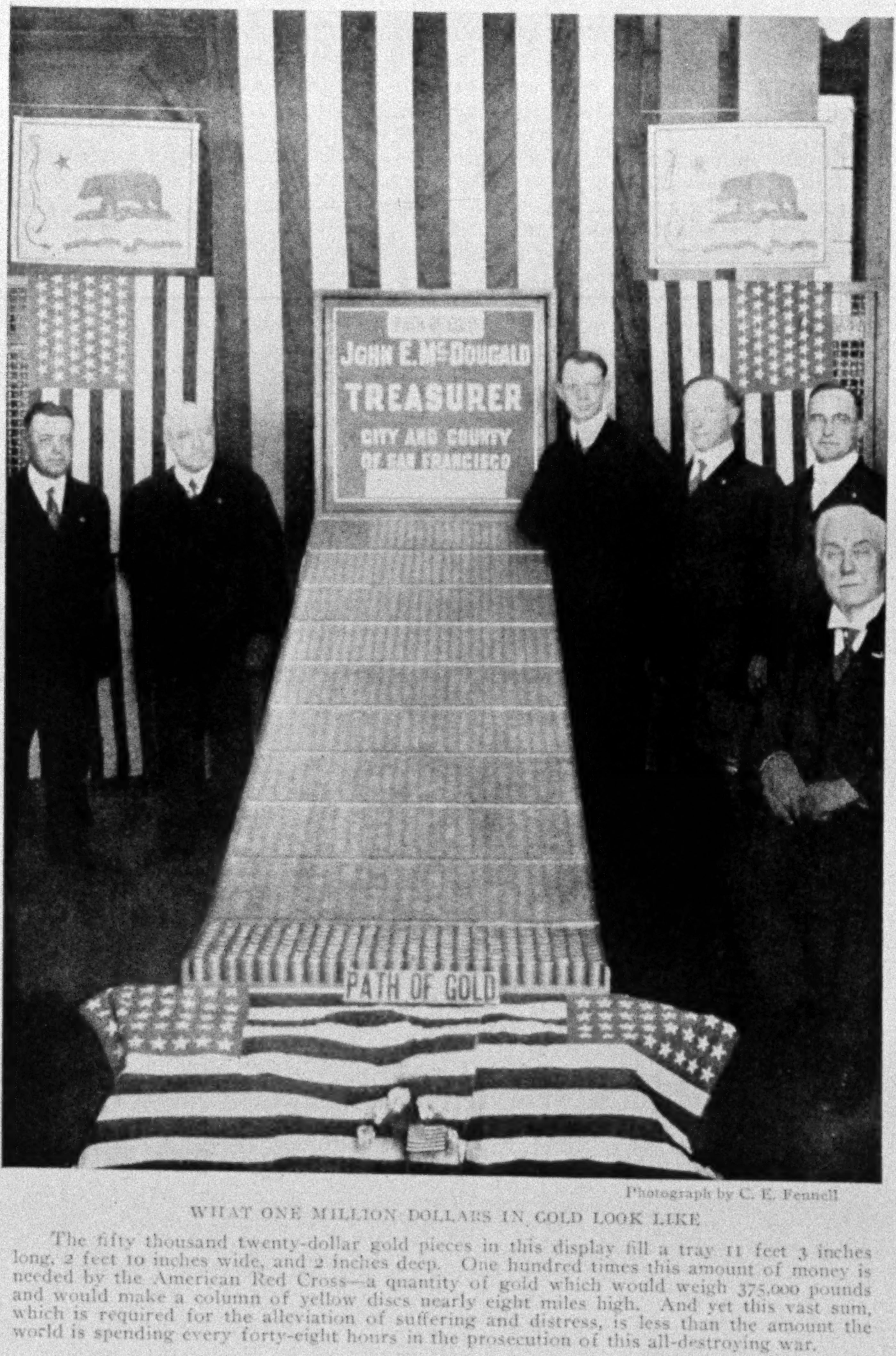


RECREATION HOUR IN A MILITARY CAMP, Y. M. C. A. BUILDING

One of the most important problems which has grown out of the modern method of trench warfare, with its months of "stale-mate" inactivity, is that of providing diversion for the soldiers. In this work the Army Young Men's Christian Association is maintaining thousands of recreation centers in army camps in the United States and Europe. The work of the Association is about as varied as the men. At the Mexican Border camps there were lectures and educational classes, concerts by such talent as Schumann-Heink, popular entertainments, and motion-picture shows which often attracted crowds so great that the Association buildings could not hold them. Volley-ball and base-ball also helped to offset the temptations of idle hours. The estimated number of letters written—free stationery furnished—reached nearly six millions.

Photograph by United States Navy Department

CLASS IN TELEGRAPHY, NAVAL TRAINING STATION


JOHN E. McDOUGALD
TREASURER
CITY AND COUNTY
OF SAN FRANCISCO
PATH OF GOLD

Photograph by C. E. Fennell

WHAT ONE MILLION DOLLARS IN GOLD LOOK LIKE

The fifty thousand twenty-dollar gold pieces in this display fill a tray 11 feet 3 inches long, 2 feet 10 inches wide, and 2 inches deep. One hundred times this amount of money is needed by the American Red Cross—a quantity of gold which would weigh 375,000 pounds and would make a column of yellow discs nearly eight miles high. And yet this vast sum, which is required for the alleviation of suffering and distress, is less than the amount the world is spending every forty-eight hours in the prosecution of this all-destroying war.

before—that of doing its own work in our own armed forces and at the same time trying to give the greatest possible help to the nations who are in desperate need of that help and who are really fighting our battle.

The Red Cross is strong now as it was never strong before for carrying on this work, and we can go before the country with absolute confidence that we can do the work that the country intrusts to us; that we can handle the money, the voluntary contributions that they may make, with the best possible efficiency and get the best possible results.

I know from personal observation what the problem is in Europe. It is beyond the power of any group of men or any nation to really meet those needs. But I have at least a vision of seeing throughout this country every individual affiliated in some way with the Red Cross through a Red Cross chapter or auxiliary branch.

Every individual that wants to help—and every individual does want to help—can be given a definite and practical burden to carry, and thus help to make this American National Red Cross give to our allies and give to this cause one of the greatest contributions toward winning the war than any nation in the world has ever given as a voluntary offering!

THE RED CROSS SPIRIT SPEAKS

"I kneel behind the soldier's trench,
I walk 'mid shambles' smear and stench,
The dead I mourn;
I bear the stretcher and I bend
O'er Fritz and Pierre and Jack to mend
What shells have torn.

"I go wherever men may dare,
I go wherever woman's care
And love can live;
Wherever strength and skill can bring
Surcease to human suffering,
Or solace give.

"I am your pennies and your pounds;
I am your bodies on their rounds
Of pain afar;
I am *you,* doing what you would
If you were only where you could—
Your avatar.

"The cross which on my arm I wear,
The flag which o'er my breast I bear,
Is but the sign
Of what you'd sacrifice for him
Who suffers on the hellish rim
Of war's red line."

—John H. Finley.

YOU MAY BE HELPING YOUR OWN BOY

HUNDREDS of our doctors and trained nurses at our country's call are leaving comfortable homes and lucrative practices, representing years of untiring effort, in order to care for the wounded and suffering in our army and in the armies of our Allies. (See page 467 of this number of the National Geographic Magazine.)

YOU can make their work much more effective and their hearts lighter by ensuring that they will be enabled to command every medical necessity with which to soften the pain of the anguished and the sick.

Let your dollars volunteer for our Red Cross War Fund, as our physicians and surgeons are doing.

Who knows but by such practical aid in preparing and equipping our hospitals for the proper care of the nation's defenders you may be helping your own boy!

Let your dollars
be YOUR
Messengers of Mercy!

CUT ON THIS LINE

N.G.M.

H. P. DAVISON,
Chairman, American
Red Cross War Council,
Washington, D. C.:

I enclose .... for the war fund of the American Red Cross.

Name ....

Address ....

The Y. M. C. A. Follows Your Flag and Your Boy Wherever They Go

WOULDN'T it gladden your heart to know that big-hearted, broad-gauged men are standing by your lad in camp and cantonment, as well as in practically every port, to give him the right hand of fellowship, to be interested in his leisure hours, and to assist him to get honest, healthful enjoyment out of them ?

In the Y. M. C. A. club-houses and athletic fields our soldiers and sailors, when jaded in body and weary of soul, find that refreshment and strengthening of inspiration which only a wise home can give.

By September our country will doubtless have at least one million men mobilized in camps this side of the ocean or in the trenches of Europe, fighting "to make the world safe," and by January first this army may have grown to two million men.

To Combat Dangerous, Dull Monotony An Army of a MILLION MEN will require

Two hundred Association buildings (see pages 470-472).
Twelve hundred experienced Association Secretaries.
Two hundred pianos and piano players.
Two hundred moving-picture machines.
Two hundred and sixty-eight thousand feet of film a day.
Two hundred talking machines and 10,000 records.
Three million sheets of writing paper daily.
Forty thousand pounds of ice per day.
Ten thousand pens a day and many barrels of ink.
Ninety-five automobiles and trucks.
Magazines by the hundreds of tons.
A Bible to every man.

AND $3,000,000, to be raised at once, to cover all the necessary expenses involved in serving this million of men until the end of the year.

**NATIONAL WAR WORK COUNCIL OF THE
YOUNG MEN'S CHRISTIAN ASSOCIATIONS
OF THE UNITED STATES**

WILLIAM SLOANE, *Chairman* JOHN R. MOTT, *General Secretary*
CLEVELAND H. DODGE, *Treasurer*

124 East 28th Street, New York

CUT ON THIS LINE

N.G.M.

CLEVELAND H. DODGE,
Treasurer,
124 East Twenty-eighth Street,
New York City :

I enclose .... for the War Work of the Y. M. C. A.

Name ....

Address ....

To insure Victor quality, always look for the famous trademark, "His Master's Voice." It is on every Victrola and every Victor Record. It is the identifying label on all genuine Victrolas and Victor Records.

Every kind of music for everybody

Your kind of music for you! The kind of music you like best!

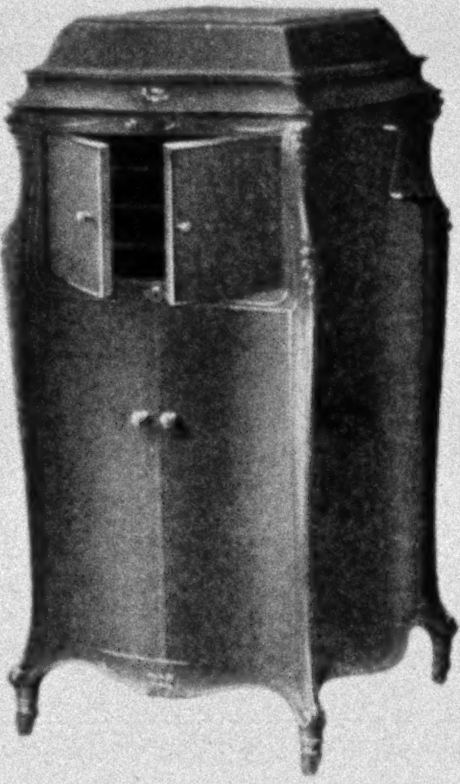
Do you prefer to hear magnificent operatic arias, portrayed by Caruso or Farrar or Melba? Or are your favorites the charming old songs of yesteryear—the ballads so sweetly sung by Gluck and McCormack?

Or it may be that your tastes run to instrumental solos—the exquisite renditions of Elman or Kreisler or Paderewski. Then again, perhaps, you would rather hear Sousa's Band play some of his own stirring marches, or enjoy Harry Lauder's inimitable witticisms.

No matter—you can hear them all on the Victrola. It is supreme in all fields of musical endeavor. It is *the* instrument for every home.

Hear your favorite music today at any Victor dealer's. He will gladly play any music you wish to hear, and demonstrate the various styles of the Victor and Victrola—$10 to $400.

Victor Talking Machine Co.
Camden, N. J., U.S.A.
Berliner Gramophone Co., Montreal, Canadian Distributors



Victrola XVII, $250
Victrola XVII, electric, $300
Mahogany or oak

Important Notice. All Victor Talking Machines are patented and are only *licensed*, and with right of use with Victor Records only. All Victor Records are patented and are only *licensed*, and with right of use on Victor Talking Machines only. Victor Records and Victor Machines are scientifically coordinated and synchronized by our special processes of manufacture; and their use, except with each other, is not only unauthorized, but damaging and unsatisfactory.

"Victrola" is the Registered Trade-mark of the Victor Talking Machine Company designating the products of this Company only. **Warning:** The use of the word **Victrola** upon or in the promotion or sale of any other Talking Machine or Phonograph products is misleading and illegal.

Victrola

New Victor Records demonstrated at all dealers on the 28th of each month

The Multigraph Senior, electrically driven and completely equipped for high-grade printing—with printers' ink, type or electrotypes; or for producing typewritten letters in quantities. Prices, $670 to $720. Hand-driven models, $175 up. Easy payments.

Counting Costs and Cutting Corners

Everybody who counts costs these days cuts corners.

Take a hint from big business on the subject.

It will save you just about half of the dollars you're paying for printed matter. That much corner-cutting would count, wouldn't it?

Your costs on stationery, office forms, price-lists, and the like are higher than ever before. They're still going up, with no one sighting the end.

The way out is via the Multigraph.

That's the way 18,000 businesses, big and little, cut a corner that cuts costs.

What were your bills for printing last year? Make a guess.

Write down the amount.

Subtract 25% to 75%, depending upon how keen you are to utilize the Multigraph's normal capacity. Or be extra-conservative; take the minimum, 25%.

The result is what the Multigraph would have put back in your pocket last year. Also it would have handed you, as a bonus, speed, convenience, privacy, dispatch, that you didn't have; and would have eliminated your waste on forms bought (to get a price) in too-large quantities.

When will you begin counting costs and cutting corners?

Now—if you use the coupon.

You can't buy a Multigraph unless you need it

THE MULTIGRAPH

Produces real printing and form-typewriting, rapidly, economically, privately, in your own establishment

The
Multigraph,
1821 E. 40th St.,
Cleveland,
Ohio.

Count me in for a hearing on counting costs and cutting corners.

Name

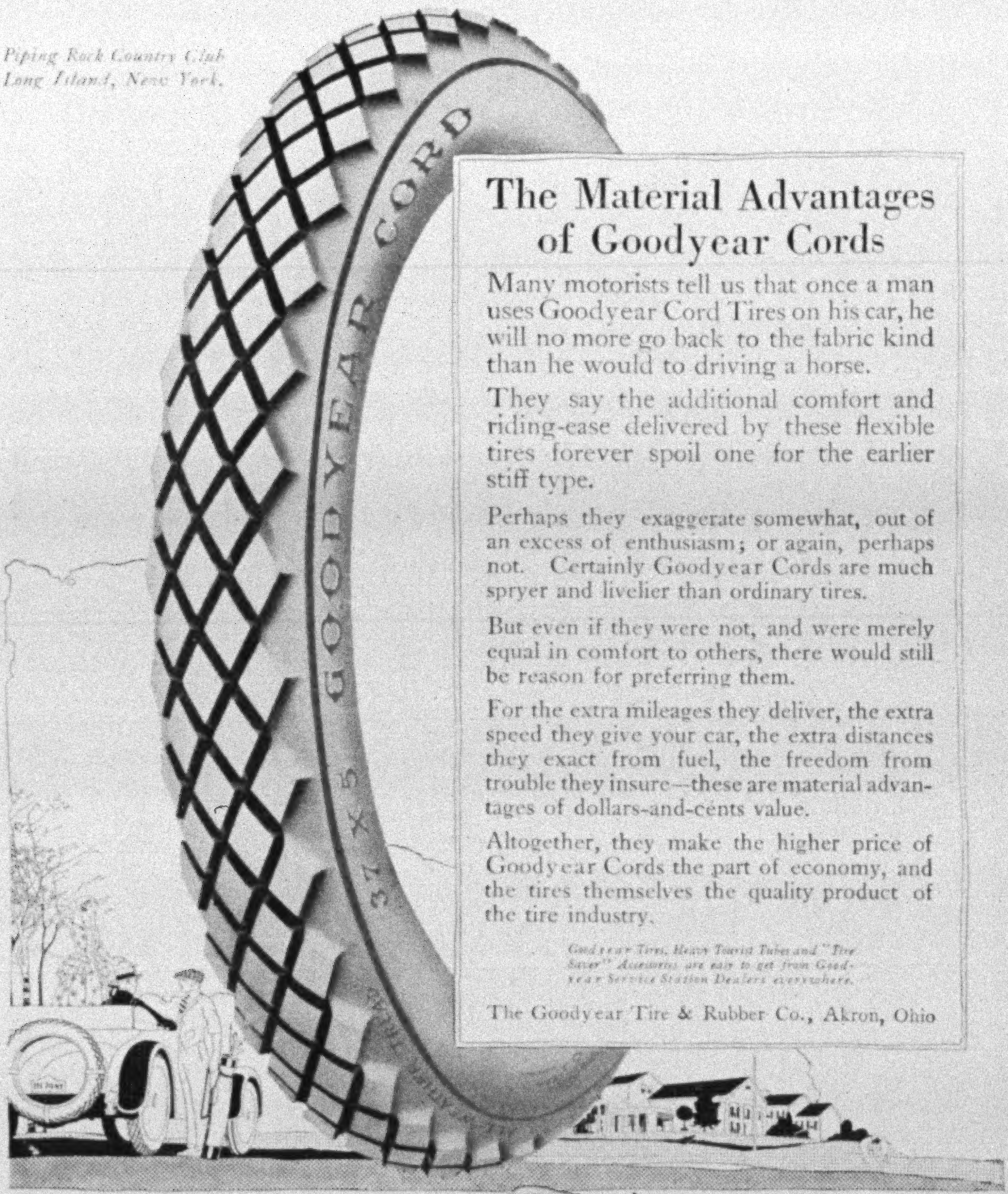
Official Position

Firm

Street Address

Town State

Piping Rock Country Club
Long Island, New York.



The Material Advantages of Goodyear Cords

Many motorists tell us that once a man uses Goodyear Cord Tires on his car, he will no more go back to the fabric kind than he would to driving a horse.

They say the additional comfort and riding-ease delivered by these flexible tires forever spoil one for the earlier stiff type.

Perhaps they exaggerate somewhat, out of an excess of enthusiasm; or again, perhaps not. Certainly Goodyear Cords are much spryer and livelier than ordinary tires.

But even if they were not, and were merely equal in comfort to others, there would still be reason for preferring them.

For the extra mileages they deliver, the extra speed they give your car, the extra distances they exact from fuel, the freedom from trouble they insure—these are material advantages of dollars-and-cents value.

Altogether, they make the higher price of Goodyear Cords the part of economy, and the tires themselves the quality product of the tire industry.

Goodyear Tires, Heavy Tourist Tubes and "Tire Saver" Accessories are easy to get from Goodyear Service Station Dealers everywhere.

The Goodyear Tire & Rubber Co., Akron, Ohio

GOODYEAR
AKRON
CORD TIRES

BRASCOLITE

TRADE MARK REGISTERED

for the Home

Every room made a cheerful sun parlor — without the sun's glare — pure, soft, white, and eye-resting light — thorough illumination.

As you know, the Brascolite has come into universal use in every field of commercial lighting — store, office, big building, restaurant, church, theatre, and club.

Now, with our completed line of new and dainty designs, made especially for home installation, we can give you just what you want for every room in the house — parlor, dining-room, bedrooms, halls, bathroom, and library.

The Brascolite offers you better lighting, decreased current consumption, fixture beauty, longer-lived bulbs, greater convenience in cleaning.

Easily and inexpensively installed on old circuits or in new buildings.

Write us for Special Folder, showing home fixture designs. Ask your dealer for a demonstration.

LUMINOUS UNIT CO. ST. LOUIS, U. S. A.

NEW YORK, 30 Church St. SAN FRANCISCO, 639 Market St.
CHICAGO, 19 S. Fifth Ave. PHILADELPHIA, 1020 Land Title Bldg.
BOSTON, Old South Bldg.
Canadian Distributors: Northern Electric Co., Ltd.

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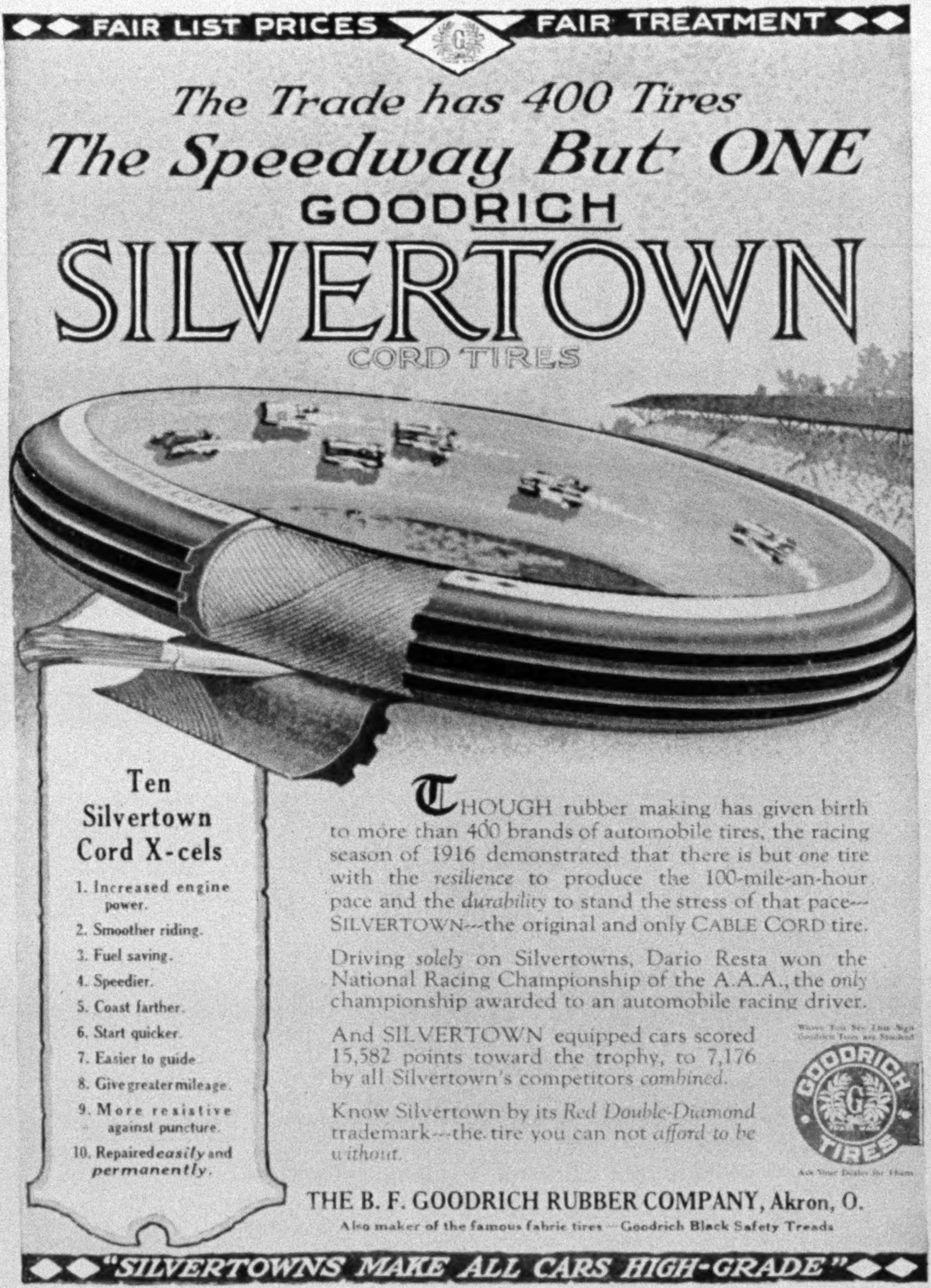


◆◆ FAIR LIST PRICES ◆ FAIR TREATMENT ◆◆

The Trade has 400 Tires
The Speedway But ONE

GOODRICH
SILVERTOWN
CORD TIRES

Ten Silvertown Cord X-cels

1. Increased engine power.
2. Smoother riding.
3. Fuel saving.
4. Speedier.
5. Coast farther.
6. Start quicker.
7. Easier to guide.
8. Give greater mileage.
9. More resistive against puncture.
10. Repaired *easily* and *permanently*.

THOUGH rubber making has given birth to more than 400 brands of automobile tires, the racing season of 1916 demonstrated that there is but *one* tire with the *resilience* to produce the 100-mile-an-hour pace and the *durability* to stand the stress of that pace—SILVERTOWN—the original and only CABLE CORD tire.

Driving *solely* on Silvertowns, Dario Resta won the National Racing Championship of the A.A.A., the *only* championship awarded to an automobile racing driver.

And SILVERTOWN equipped cars scored 15,582 points toward the trophy, to 7,176 by all Silvertown's competitors *combined*.

Know Silvertown by its *Red Double-Diamond* trademark—the tire you can not *afford to be without*.

Where You See This Sign Goodrich Tires are Stocked

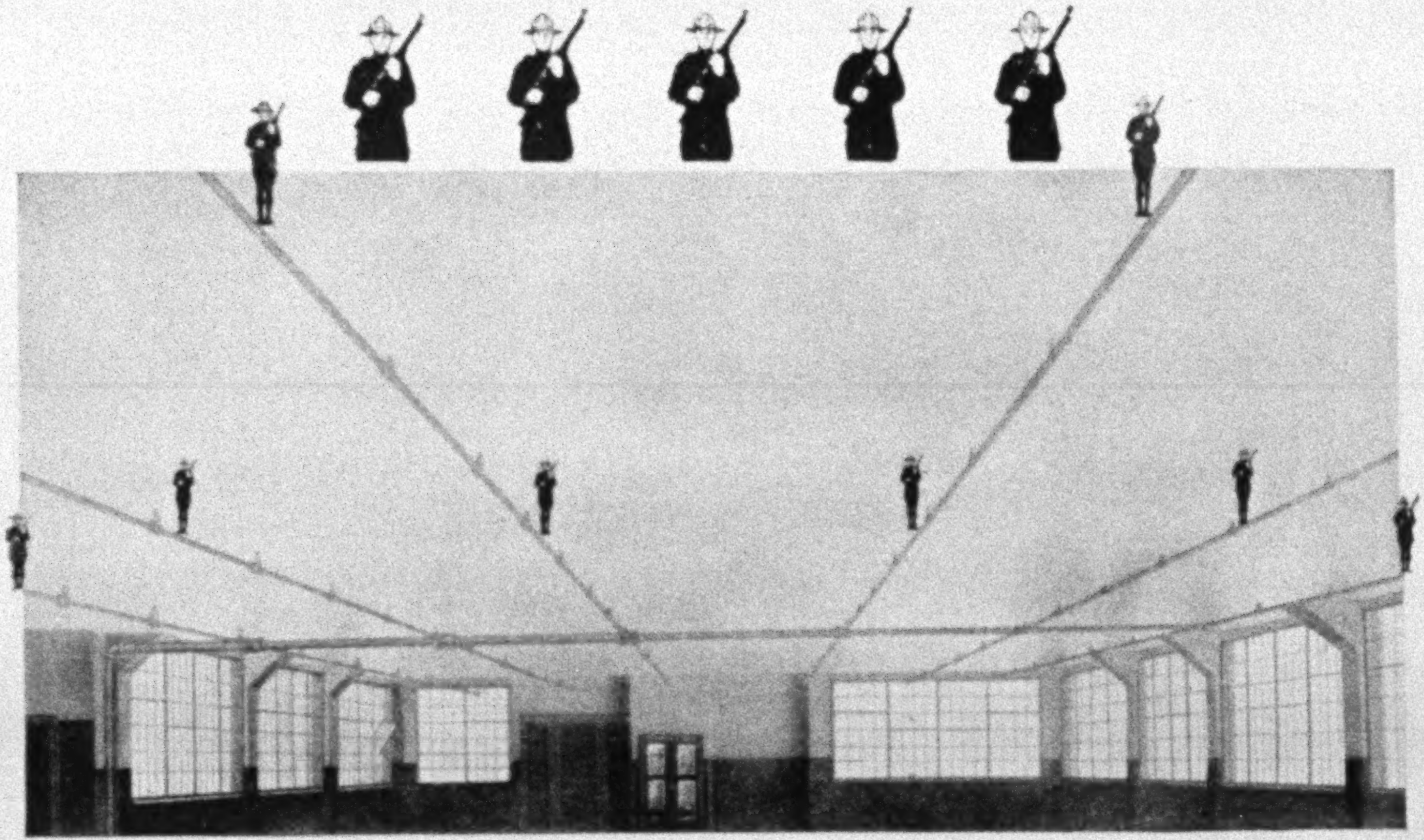
GOODRICH TIRES

Ask Your Dealer for Them

THE B. F. GOODRICH RUBBER COMPANY, Akron, O.

Also maker of the famous fabric tires—Goodrich Black Safety Treads

◆◆ "SILVERTOWNS MAKE ALL CARS HIGH-GRADE" ◆◆



As sentries guard the front

AT the Gemco Manufacturing Company factory at Milwaukee an explosion occurred in an enameling-oven and set fire to the dipping-tank.

It was all one big flash in a minute. The flames spread over an area of 1,500 square feet, threatening a great conflagration.

As the flames mushroomed over the ceiling, however, something else happened. Up there, in military array, stood little mechanical Sentries, protecting the inflammable contents of this fireproof building. Snap—snap—snap—snap went the Sentries; not the rattle of guns, but the snap of the mechanical triggers of the Grinnells, touched off by the heat. Instantly that fire-swept area was the scene of a drenching rain.

All along the ceiling, amid burning gases, Grinnell Sprinklers were working intensely.

At the first moment the glass in the windows had dropped out and flames rolling forth had climbed to an open window on the floor above. There, unknown to any one, they started a second fire. But a Grinnell Sentinel waiting up there took care of it as soon as the heat grew intense.

The fire department was prompt, but the Grinnells had done the work. There was nothing left but to turn off the water and investigate the damage. Throughout the rest of the plant, business was resumed and went on as usual.

"It saved us from a complete wreck," the Company reported.

That explains why insurance is almost free in *that* business. The plant is safe from a serious fire; the risk is small, not merely on the building itself, which is a modern fireproof structure, but on the *contents* as well.

MANY business men fondly imagine that if they have fireproof buildings they are safe from fire. But all authorities will tell you that fireproof construction, with the usual spacious rooms and hallways, is like a steel furnace, incombustible itself, perhaps, but capable of letting your goods burn merrily inside of it.

The awful Triangle Waist holocaust was in a fireproof building. So are plenty of other *big* fires every year.

The Hinde & Dauch Paper Company, the five-million-dollar corrugated box concern of Sandusky, Ohio, were paying a fire insurance rate of $1.20 per hundred on the contents of their modern fireproof building. When the Grinnell System was ready for business the rate fell to 12c. per hundred, saving them $2,800 a year on insurance. (The Grinnell cost only a little over $11,000, so it was a 25% investment paying for itself over and over again.)

In another of their Sandusky plants and in their Delphos plant the rate fell from $2.75 to 35c. per hundred.

Observe that these were modern, well-built, fireproof buildings.

One of the biggest manufacturers of burial-caskets and phonograph-cabinets says:

"One Sunday afternoon while in my office I smelled smoke and found a fire next to the stairway. It had just started among some sweepings and I easily beat it out with my coat.

"That little fire set me to thinking: Suppose I had not been there; suppose it had happened some other Sunday, or at night, and the watchman had been ten or fifteen minutes late? I was well covered by insurance, but even then a serious fire would have meant a heavy loss."

The contents of your building—the machinery, the goods in process, the patterns, the furniture, the raw materials—are probably worth a great deal. Could you start with a fire-swept building and restore your going business in less than six months? With fire insurance you are only half protected.

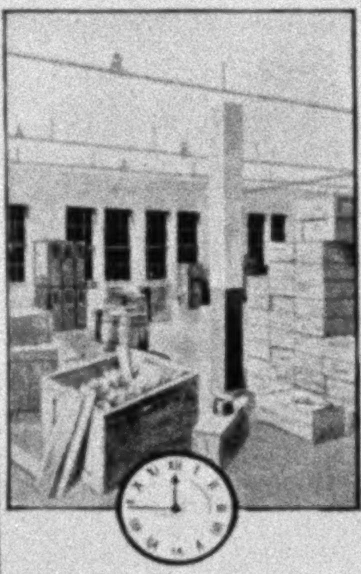
Sentries are self-paid

To protect the uninsured part, put a Grinnell Sentry over each and every 80 square feet. What they save on the cost of insuring your property values will usually pay their whole cost in a few years.

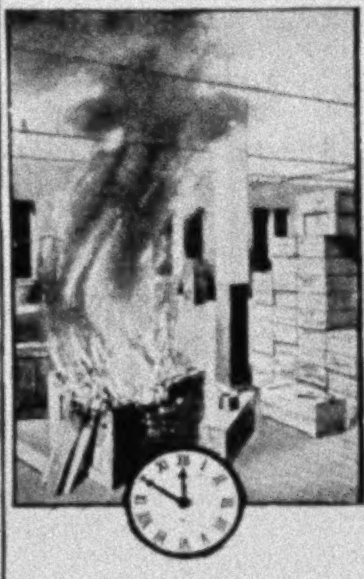
Grinnell Systems are easily installed, without disturbance to occupants or interruption of business, because Grinnell Systems are shop-assembled and brought up to the job complete, save for a few last connections.

Write—now—to the General Fire Extinguisher Company, 293 West Exchange Street, Providence, R. I., and get a copy of the Grinnell Information Blank. Fill it out with the required facts as to floor area, insurance carried, etc., and we can tell you in round figures about how much saving in insurance a Grinnell System would bring you. Wouldn't you like to get your insurance almost free?

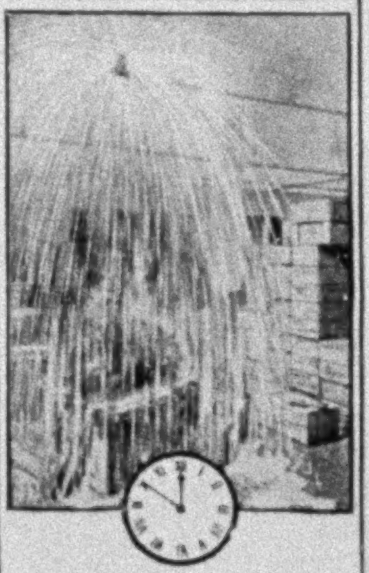
Don't theorize—get the figures!



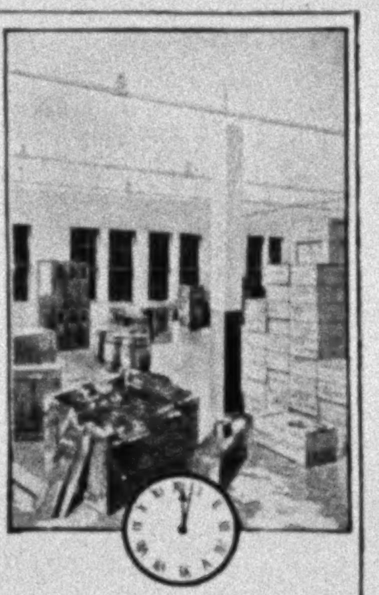
1. *On duty with many others, waiting for a fire—waiting perhaps for 30 years up near the ceiling—the ingenious mechanical watchman.*



2. *Here comes the fire at midnight. The column of heat rises and at 155° the fusible strut in the nearest Grinnell softens and melts.*



3 *Snap—spurt—splash! A drenching downpour right on the heart of the fire. Alarm-bell clanging in the distance.*



4 *Fire out before watchman arrives. Water turned off. No damage worth reporting. Next morning—business as usual.*

GRINNELL

AUTOMATIC SPRINKLER SYSTEM

The Factory-Assembled System

ROYAL GORGE, COLORADO

Come West for your Vacation

A vacation is no longer an expense or a luxury. It's a health and efficiency measure.

Make this year's vacation a worth-while, outdoor western one. There's Colorado with dozens of ideal vacation points; Salt Lake City and the great Intermountain country; Yellowstone Park, the Pacific Northwest and California with its national parks, Yosemite and Sequoia.

Trips can be made to any one of these places separately, or they may all be combined in one grand tour. Best reached through St. Louis and Kansas City by the

Missouri Pacific

The most picturesque route between the Mississippi and the Rockies.

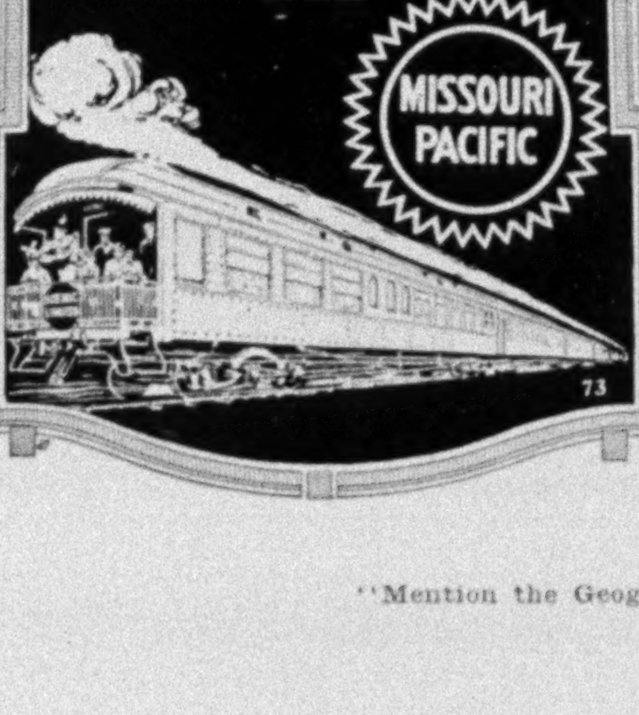
THE Scenic Limited

Superb, fast, steel train leaves St Louis daily for Kansas City, Pueblo, Colorado Springs, Denver, Royal Gorge, Glenwood Springs, Salt Lake City and San Francisco.

Write for full information, rates, reservations and beautifully illustrated travel literature.

C. L. STONE, Passenger Traffic Manager
St. Louis

MISSOURI PACIFIC



Send 2c. Stamp For Sample

Made in U. S. A.

WHITE ROSE
TRADE MARK
REG. U.S. PAT. OFF.
No 4711
GLYCERINE-SOAP

Its delicacy and purity, transparency, the richness and abundance of it lather, the charm of its perfume—these are some of the qualities that make No. 4711 White Rose Glycerine Soap so delightful.

No 4711 White Rose Glycerine Soap

Discerning women—here and abroad—have made this most satisfying of all soaps their all-time choice. Over three generations of women testify to its refinement and goodness.

You can get No. 4711 White Rose Glycerine Soap at your favorite department store or druggist.

For the sample cake, send 2c. stamp; or for 10c. in stamps we will send you a package containing a sample cake of No. 4711 White Rose Glycerine Soap, a sample bottle of No. 4711 Bath Salts, and a sample bottle of No. 4711 Eau de Cologne.

MÜLHENS & KROPFF, Dept. 18, 25 West 45th Street, New York

"Beautiful Birch for Beautiful Woodwork"

Beautiful **birch**

Your Question Answered

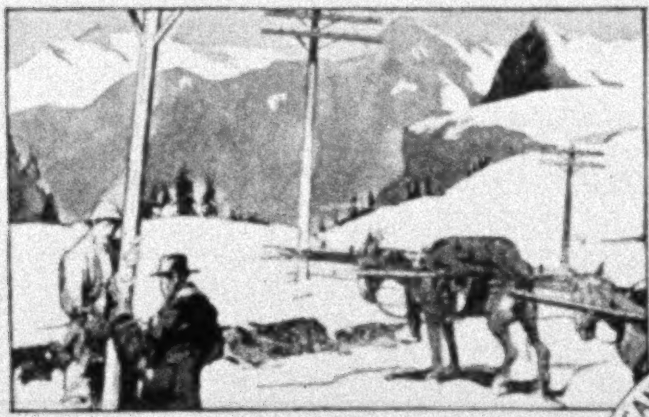
One of the greatest of this world's pleasures, planning your "own home," is often marred by doubts—usually connected with the pocket.

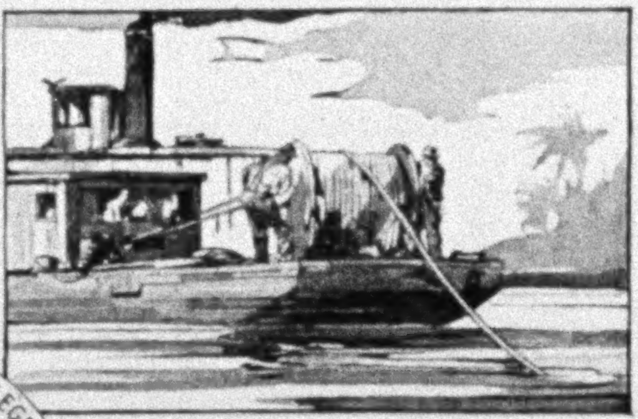
There is a wood which removes all your doubts concerning interior trim while soothing your pocketbook nerve by its reasonable price—"Beautiful **birch**."

BECAUSE it is beautiful, hard and wear-resisting, and of a color which shows the whole gamut of finishes from light to dark, including white enamel, "Beautiful **birch** is the natural trim for the American home."

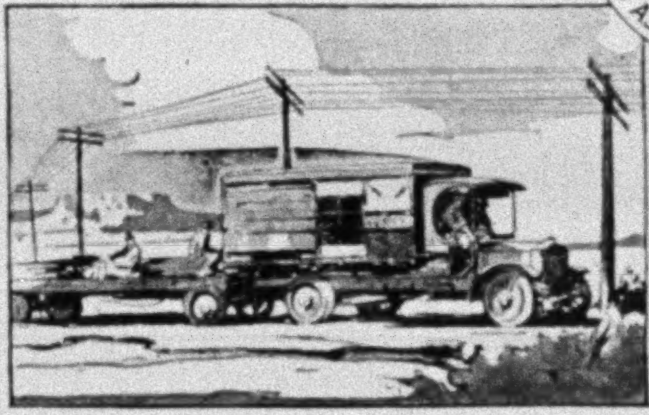
FREE *Six little panels in six handsome finishes with a common sense illustrated book. Write, please.*

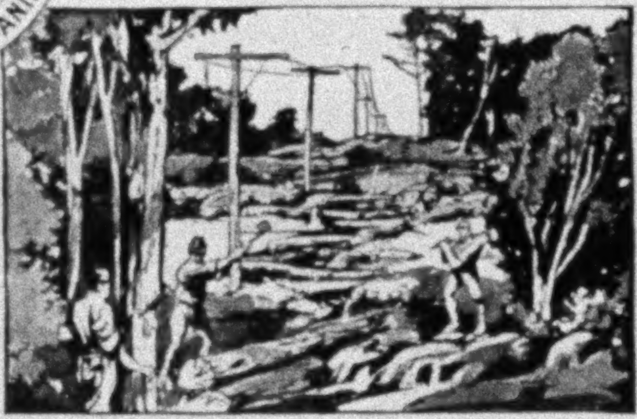
The NORTHERN HEMLOCK *and* HARDWOOD MFR'S ASS'N
214 F. R. A. BUILDING OSHKOSH, WIS.





AMERICAN TELEPHONE & TELEGRAPH CO.
LOCAL AND LONG DISTANCE TELEPHONE
BELL SYSTEM
AND ASSOCIATED COMPANIES





Meeting the Universal Need

In the high passes of the mountains, accessible only to the daring pioneer and the sure-footed burro, there are telephone linemen stringing wires.

Across bays or rivers a flat-bottomed boat is used to unreel the message-bearing cables and lay them beneath the water.

Over the sand-blown, treeless desert a truck train plows its way with telephone material and supplies.

Through dense forests linemen are felling trees and cutting a swath for lines of wire-laden poles.

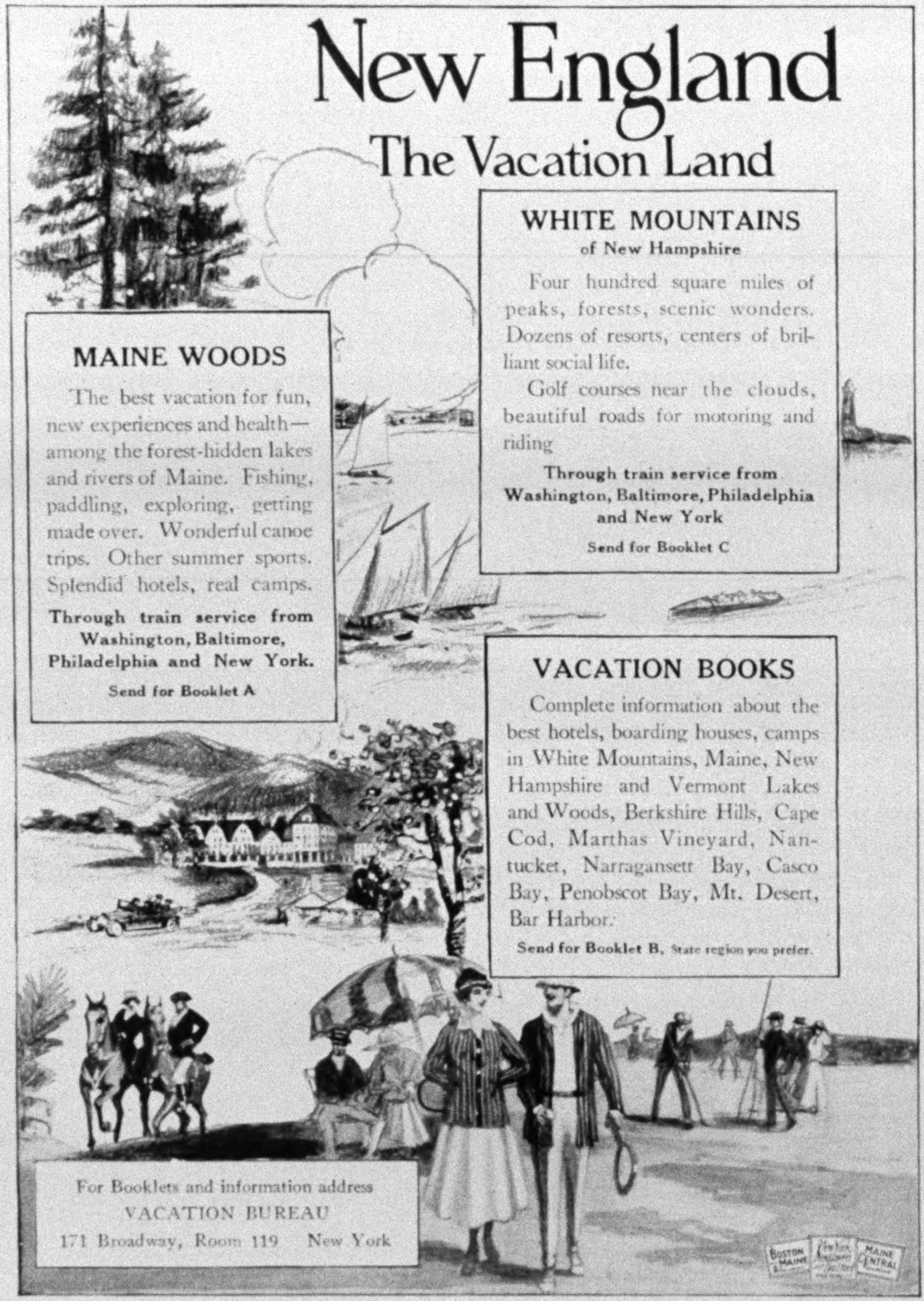
Vast telephone extensions are progressing simultaneously in the waste places as well as in the thickly populated communities.

These betterments are ceaseless and they are voluntary, requiring the expenditure of almost superhuman imagination, energy and large capital.

In the Bell organization, besides the army of manual toilers, there is an army of experts, including almost the entire gamut of human labors. These men, scientific and practical, are constantly inventing means for supplying the numberless new demands of the telephone using public.

AMERICAN TELEPHONE AND TELEGRAPH COMPANY
AND ASSOCIATED COMPANIES

One Policy *One System* *Universal Service*



New England
The Vacation Land

MAINE WOODS

The best vacation for fun, new experiences and health—among the forest-hidden lakes and rivers of Maine. Fishing, paddling, exploring, getting made over. Wonderful canoe trips. Other summer sports. Splendid hotels, real camps.

Through train service from Washington, Baltimore, Philadelphia and New York.

Send for Booklet A

WHITE MOUNTAINS
of New Hampshire

Four hundred square miles of peaks, forests, scenic wonders. Dozens of resorts, centers of brilliant social life.

Golf courses near the clouds, beautiful roads for motoring and riding

Through train service from Washington, Baltimore, Philadelphia and New York

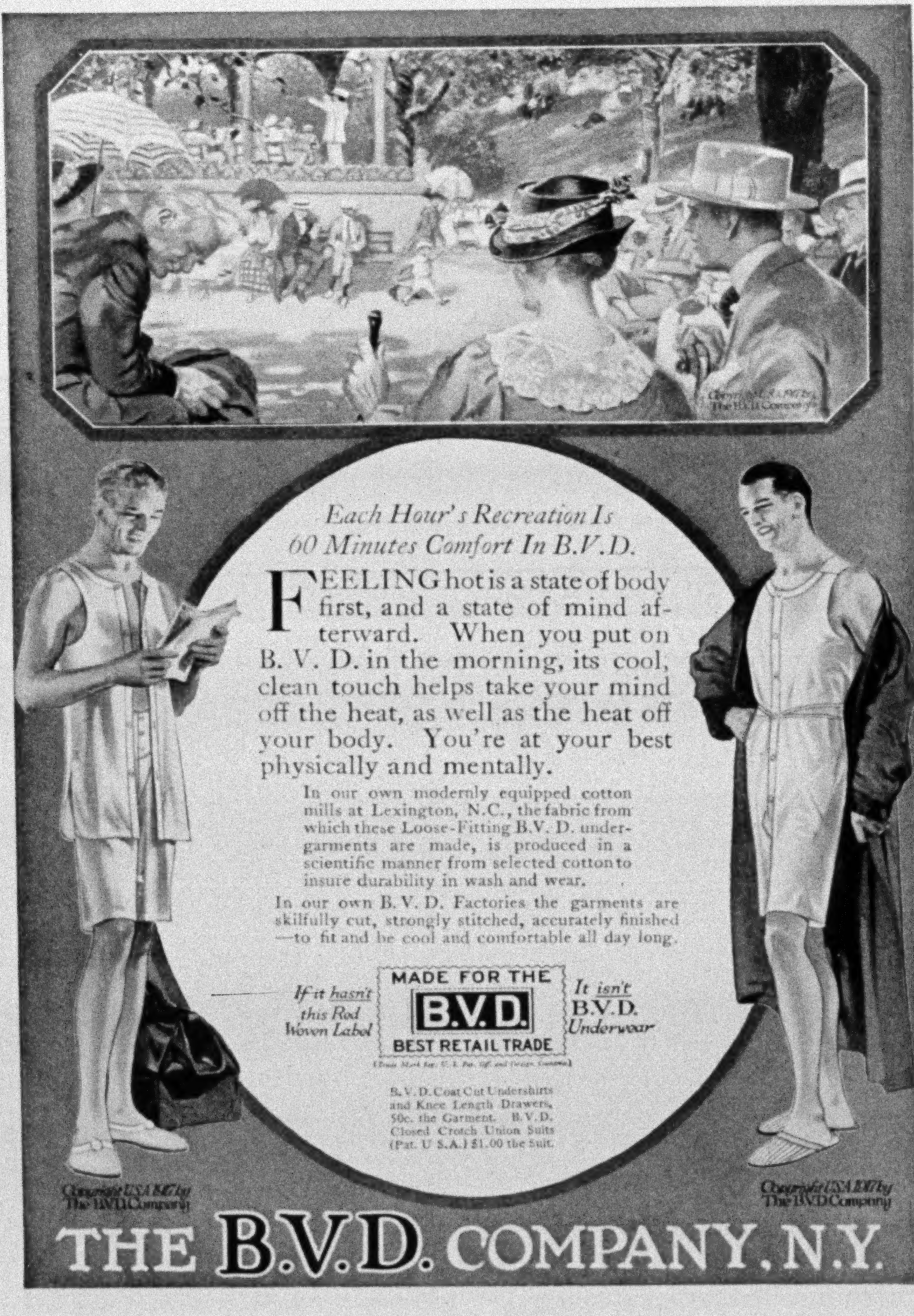
Send for Booklet C

VACATION BOOKS

Complete information about the best hotels, boarding houses, camps in White Mountains, Maine, New Hampshire and Vermont Lakes and Woods, Berkshire Hills, Cape Cod, Marthas Vineyard, Nantucket, Narragansett Bay, Casco Bay, Penobscot Bay, Mt. Desert, Bar Harbor.

Send for Booklet B. State region you prefer.

For Booklets and information address
VACATION BUREAU
171 Broadway, Room 119 New York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Each Hour's Recreation Is 60 Minutes Comfort In B.V.D.

FEELING hot is a state of body first, and a state of mind afterward. When you put on B. V. D. in the morning, its cool, clean touch helps take your mind off the heat, as well as the heat off your body. You're at your best physically and mentally.

In our own modernly equipped cotton mills at Lexington, N.C., the fabric from which these Loose-Fitting B.V.D. undergarments are made, is produced in a scientific manner from selected cotton to insure durability in wash and wear.

In our own B. V. D. Factories the garments are skilfully cut, strongly stitched, accurately finished—to fit and be cool and comfortable all day long.

If it hasn't this Red Woven Label

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BEST RETAIL TRADE

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B. V. D. Coat Cut Undershirts and Knee Length Drawers, 50c. the Garment. B. V. D. Closed Crotch Union Suits (Pat. U S.A.) $1.00 the Suit.

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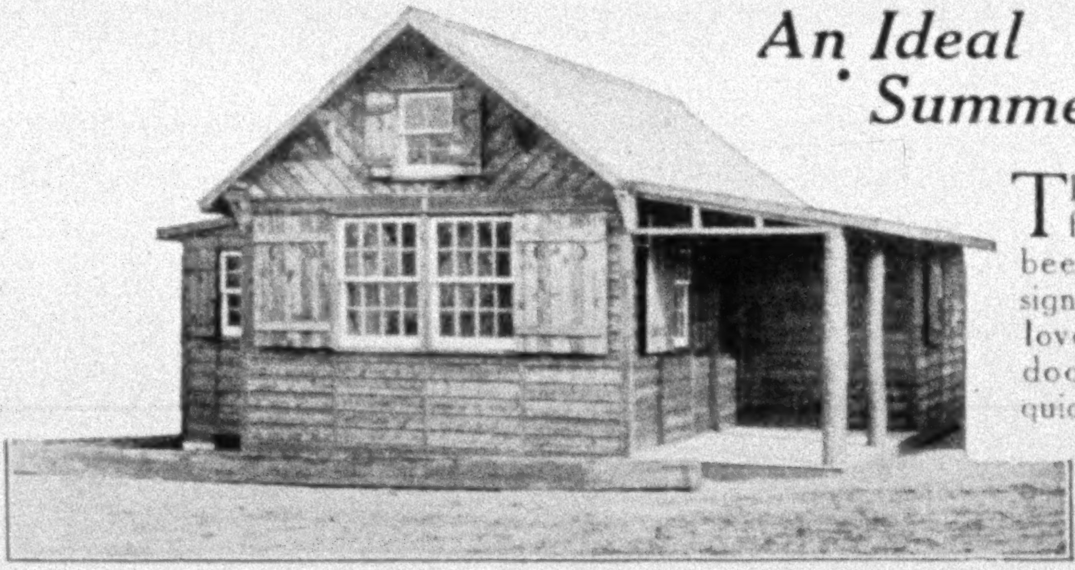

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This season give your lawn the attention it deserves. Use the Ideal Power Lawn Mower—it makes possible *double* the usual amount of care with *less labor* and *more economy*—it insures a consistently beautiful sward.

The Ideal Junior is particularly designed for well laid-out lawns and gardens. Cuts smoothly and swiftly on level or grades. Cuts close to walks and flower beds. Eliminates nuisance of horse-drawn contrivances on delicate turf and expense of squad of hand-propelled machines. Simple to operate and easy to care for.

Write for detailed information—now while the season is young.

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R. E. OLDS, Chairman

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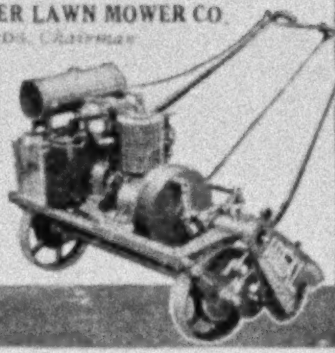
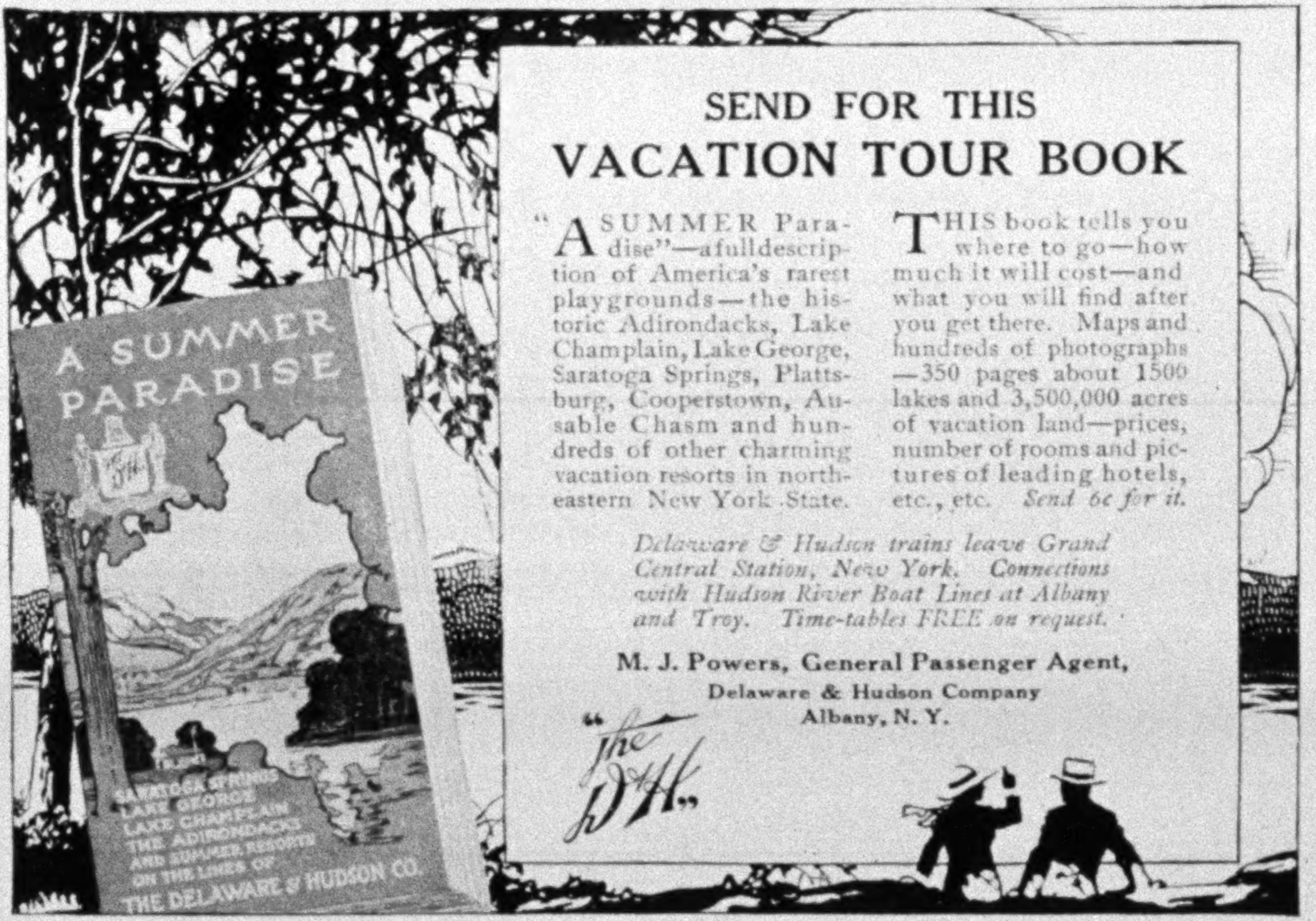


Ideal Junior Power Lawn Mower

$225



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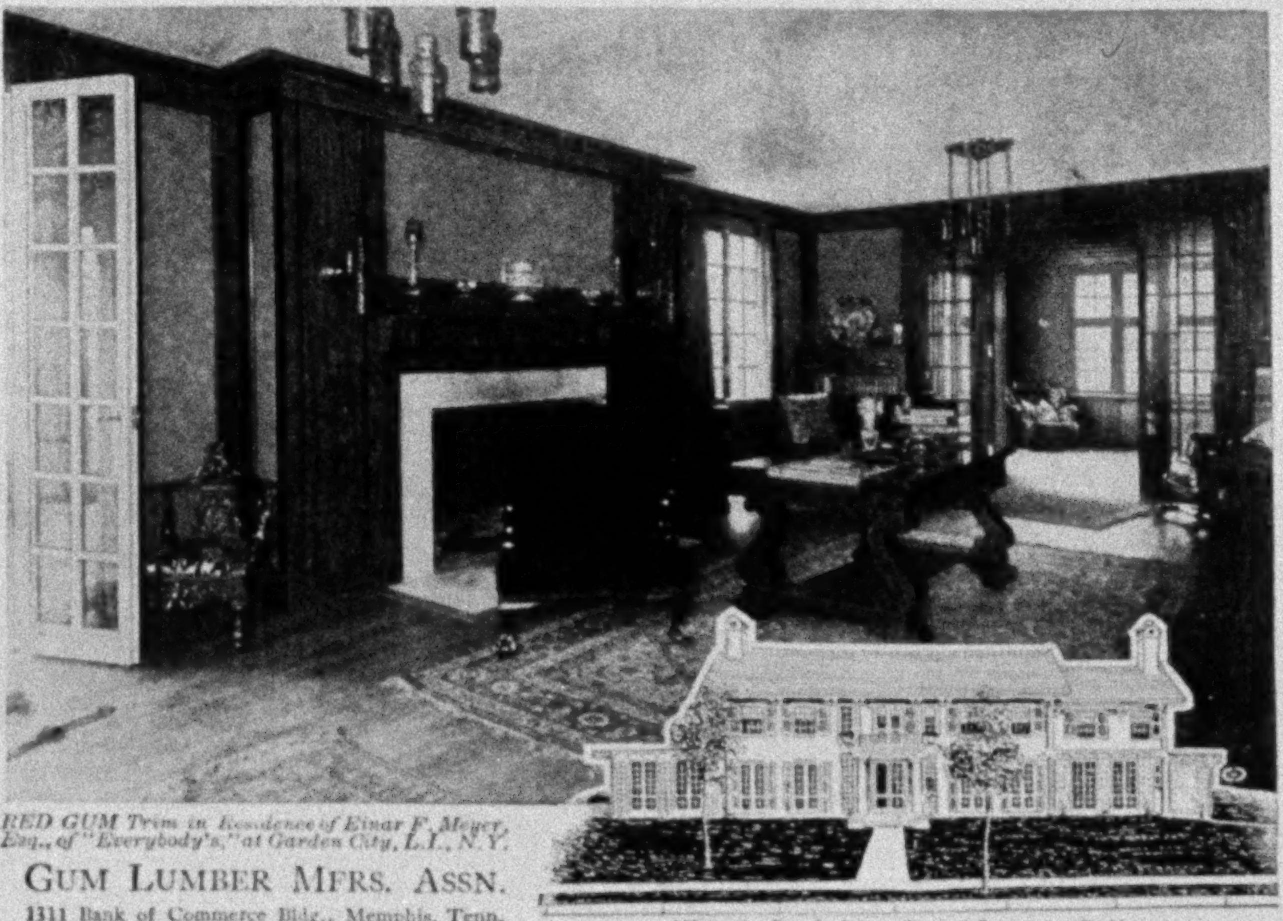

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AUTO GAR
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PUT A CRIMP IN FUEL COSTS

You have no part in the establishment of gasoline prices. You *must* bow to the current per gallon "cost sign"—a high one, too. But you can, however, through employment of the

NEW STROMBERG CARBURETOR

reduce the cost of car operation by reducing the *amount* of fuel consumed—by getting *more miles* per gallon.

The unapproached records of gasoline economy created by the New Stromberg Carburetor would appear miraculous indeed could they not be explained by proper principles of operation, and would bear the stamp of achievement attained under most favorable conditions were they not solidly backed by day after day performances of *pronounced* reduction in fuel consumption on all styles of cars.

Installation of the New Stromberg Carburetor on *any* car not only means instant and decided reduction in fuel consumption, but also increased speed, easier starting, and more perfect acceleration.

Write for full particulars, giving name, model, and year of your car.

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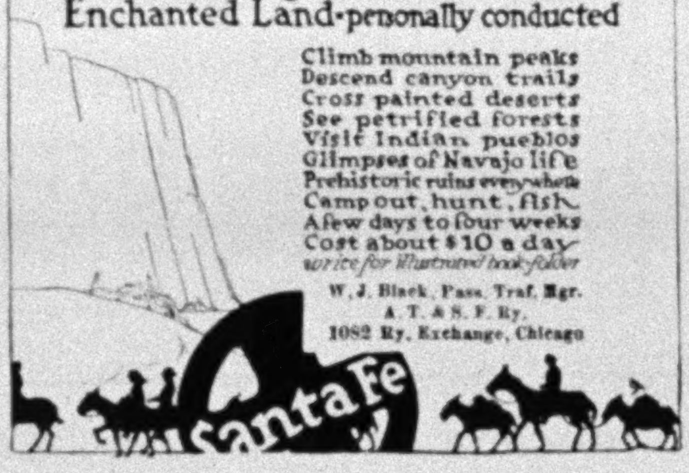
Trips by saddle and pack-team or auto-through New Mexico Arizona Enchanted Land-personally conducted



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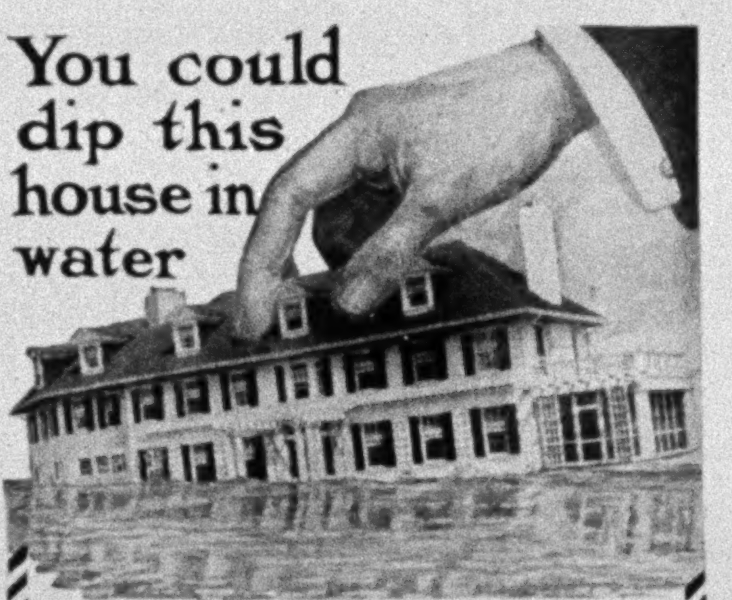
You could dip this house in water



Stucco, concrete, or brick walls absorb much water, becoming damp, unsanitary, and disfigured. But they can be waterproofed and beautified with

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A liquid cement coating which becomes an inseparable part of the wall, sealing all pores and filling hair cracks. Hard as flint. Damp-proof, weather-resisting. Gives uniform, artistic color. Applied to new or old walls. Furnished in a variety of pleasing tones. It will pay you to learn about Trus-Con Water-proofing Products. Write for full information, telling your needs.

THE TRUS-CON LABORATORIES
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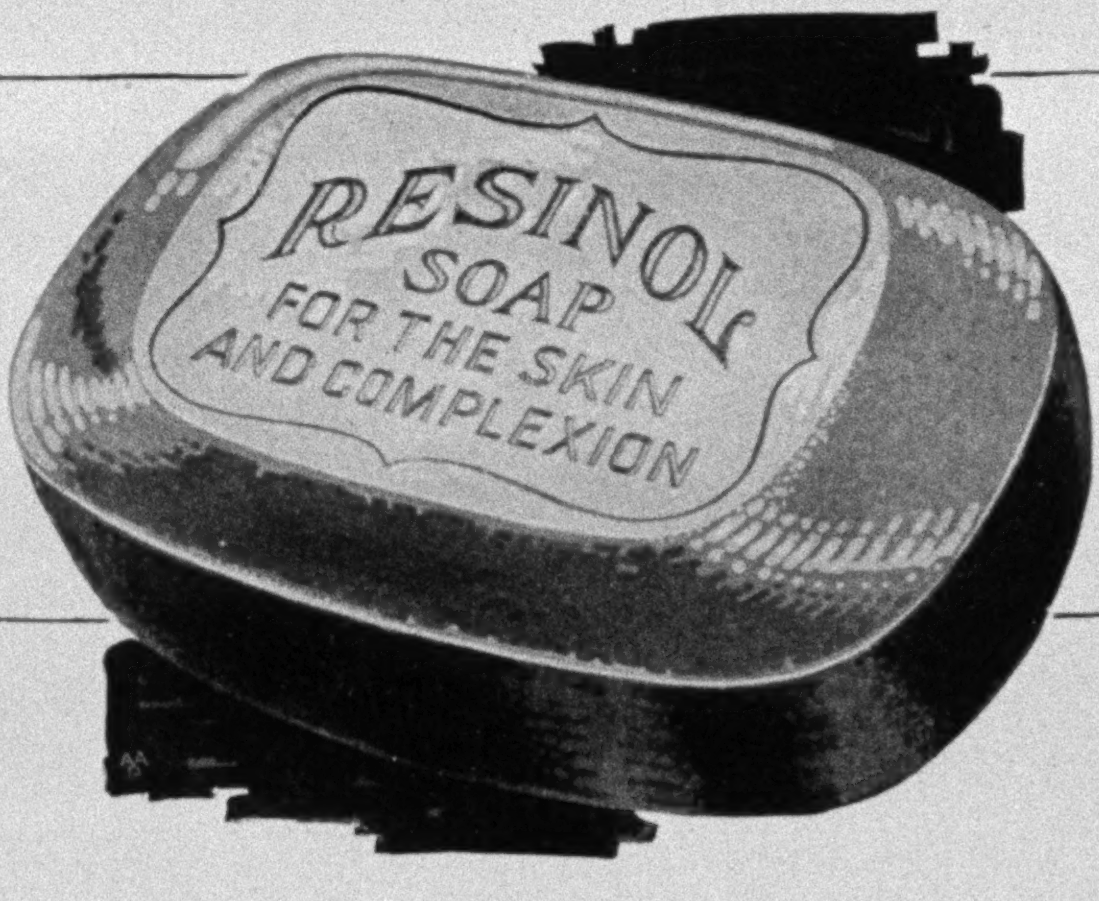
THIS soap *really* protects the skin

Busy, intelligent men and women know what an asset—and comfort—a clear, healthy skin is. But they are too much absorbed in important affairs to give much time and thought to the matter, and the result is often unpleasant. If they adopt Resinol Soap for the toilet and bath, however, they find their skins cared for automatically.

Resinol Soap has an unusually cleansing lather, a mild, refreshing odor, and just enough of the soothing, healing Resinol medication to relieve clogged, irritated pores, and to give the skin that healthy, "outdoor" look which goes with a clear eye and a clear brain.

Resinol Soap is not the "Fountain of Youth," but its regular use will greatly help to preserve the delicate texture and coloring of a woman's complexion far beyond the time when most lose them.

Yet Resinol Soap costs but twenty-five cents, just enough to insure the utmost refinement in manufacture, the utmost satisfaction in use. Sold by all druggists and dealers in toilet goods. For a generous trial-size cake free, write to Dept. 23-A, Resinol Chemical Co., Baltimore, Md.



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THE most satisfying trip in America for health and recreation. Almost 1000 miles of lakes, rivers and rapids, including the Thousand Islands, the exciting descent of the marvelous rapids, the historic associations of Montreal. Quaint old Quebec with its famous miracle-working shrine of Ste. Anne de Beaupré and the renowned Saguenay River with its stupendous Capes, "Trinity" and "Eternity," higher than Gibraltar.

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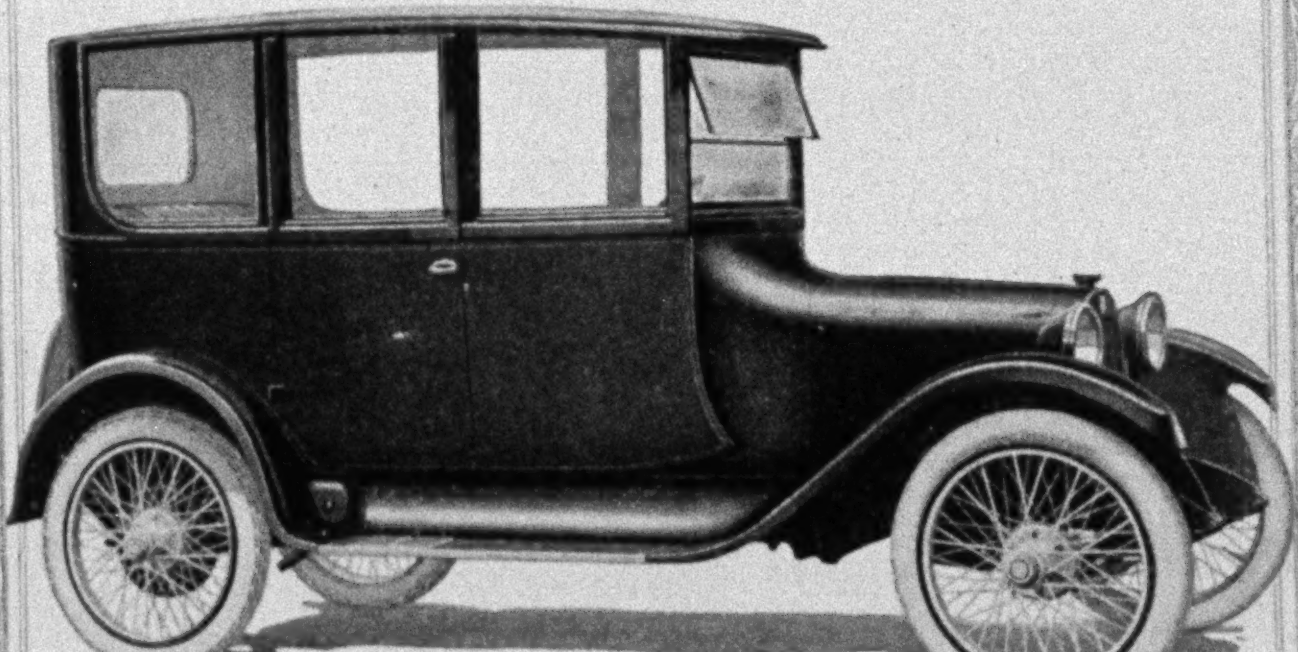

The custom of marking burial places is a beautiful one, and as old as human kind.

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The Rock Beautiful—and Everlasting

is most appropriate for this purpose because of its beauty, stability and permanence.

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THE AMERICAN OAK MFRS. ASSN. know the whys and hows of OAK. Ask them any sort of questions. Please address R. 1416, 14 Main St., Memphis, Tenn.

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LUNCH SET
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EVERYBODY who goes motoring, or on any outdoor jaunt, takes along a

Mapleware Lunch Set

the uniquely distinctive wood-fibre table-spread and napkins, and the sensible sugar-maple dishes, make an ideal outdoor luncheon service.

No washing of dishes—just pick up with remnants and burn. The set serves any menu the—hot or cold—to 6 people. It contains

- 6 Dinner Plates
- 2 Long Platters
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- 12 Sanitary Spoons or Spreaders
- 1 Table Cover, 48 x 60 inches (wood fibre)
- 6 Large Napkins (wood fibre)

Retail price, 35c the set; 3 sets, $1.00. Trial sets on receipt of price.

The Oval Wood Dish Co.
Dept. 10, Delta, Ohio

New Orleans
San Francisco

New York
Toledo, Ohio

THE FRANKLIN CAR

SCIENTIFIC LIGHT WEIGHT HOLDS THE ROAD

A PROMINENT Aeronautical Engineer, recently employed by the United States Government, writes to the Franklin Company:-

"Isn't it remarkable how the idea sticks in some people's heads that a heavy car holds the road better? They don't seem to know that *unsprung weight* is the principal factor to be considered. By reducing this unsprung weight to the minimum in the new Franklin, you have a car that *hangs to the road* better than anything I have ever ridden in.

"P. S.—Problem: Since I got 15,000 miles out of my tires on my old Franklin, weighing 2,600 pounds, how many miles will I get with my new Franklin, weighing 2,280 pounds?"

THERE is much in this question of *scientific light weight* that the average motorist does not seem to grasp.

For example, the light, flexible car may be *stronger* than a rigid, heavy car.

It is free from so much dead weight.

Picture two cars side by side: one weighs approximately 2,200 pounds, the other 3,000 pounds. Each is designed to perform the same task—carry an average load of five people, about 750 pounds of live weight.

* *

Now remember that *dead weight* is the killing thing on automobile mechanism. That's why the average Truck is pounded to pieces.

Your *light, flexible car* starts on its work *free* from nearly a thousand pounds of *dead weight.* Wherever it goes and for all its life, it moves free from that sagging, grinding load.

Your heavy car, from the minute it starts and as long as it runs, carries a thousand extra pounds of dead weight—an *excess* nearly *twice* its average *live load.*

Think what that does to the tires! Think what it costs in gasoline! Think what it means in repairs and depreciation!

And what does it give you in return?

More road ability? No!

Greater average speed from place to place? No!

More comfort and reliability? No!

Any rough road tells the story!

Every obstruction raises the heavy, rigid car bodily off the road—a constant hammering action that affects alike the car and its passengers.

While the Franklin, with its light unsprung weight and full elliptic springs, *holds its wheels to the road.* Vibration and bump are absorbed by flexible construction. The body of the car, with its passengers, rolls along with easy, unbroken motion.

* *

Keeping the road is a matter of *balance* and *light unsprung weight.*

No matter what your horse-power, a Franklin will pass you, over any thirty miles of winding country road. It will leave you when you slow down at the first sharp curve or rough place. And the next time you see it, it will be rounding the curve ahead, hugging the *inside* of the track at *thirty miles an hour.*

Try to follow it with your heavy car, and your rear wheels will skid clear across the road and over into the ditch, if you are not careful. Whereas the Franklin, with its scientific light weight, its resiliency and easy-rolling caster action, holds to its course.

Watch any Franklin owner handle his car. He will tell you it is the easiest, simplest car he ever drove—with a *comfort, safety,* and *economy* that you get *only* from this *Scientific-Light-Weight* Car.

Touring Car	2280 lbs.	$1950.00	*Cabriolet*	2485 lbs.	$2750.00	*Town Car*	2610 lbs.	$3100.00
Runabout	2160 lbs.	1900.00	*Sedan*	2610 lbs.	2850.00	*Limousine*	2620 lbs.	3100.00
Four-passenger Roadster	2280 lbs.	1950.00	*Brougham*	2575 lbs.	2800.00	*All Prices F. O. B. Syracuse*		

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Keep a Kodak Story of the Baby

And, along with it, written on the film at the time, keep the dates and titles. How old was Baby when this was taken? Where were we the year that that was taken? Such records mean a great deal when baby has begun outgrowing baby ways and time has begun playing tricks with memory.

And to make an authentic, permanent record, *on the negative*, is a simple and almost instantaneous process with an

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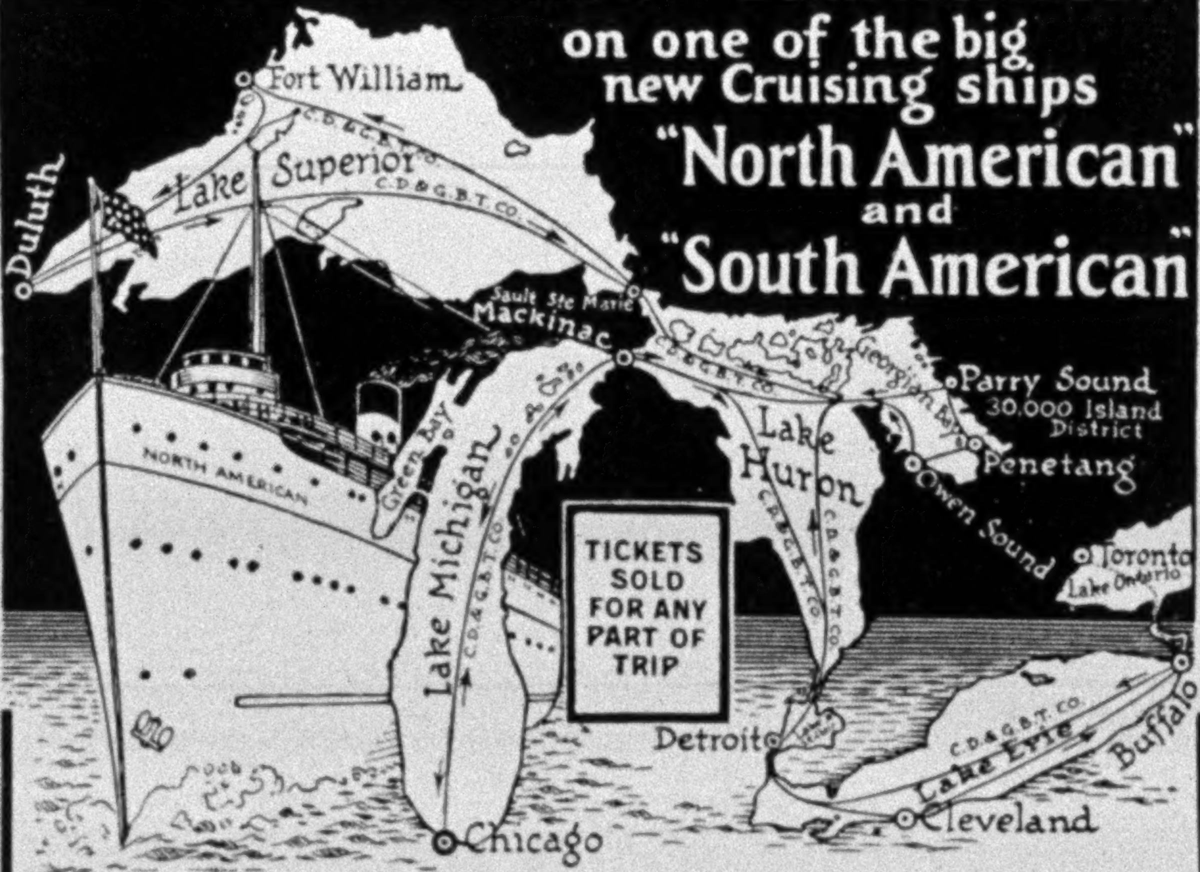
"North American" and "South American"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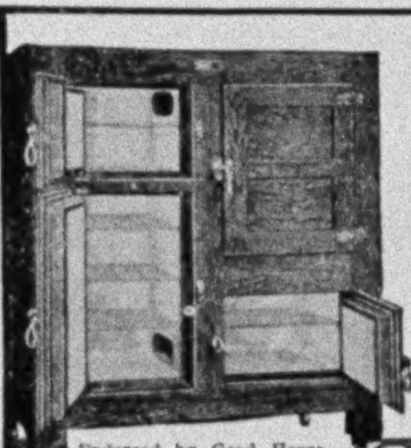

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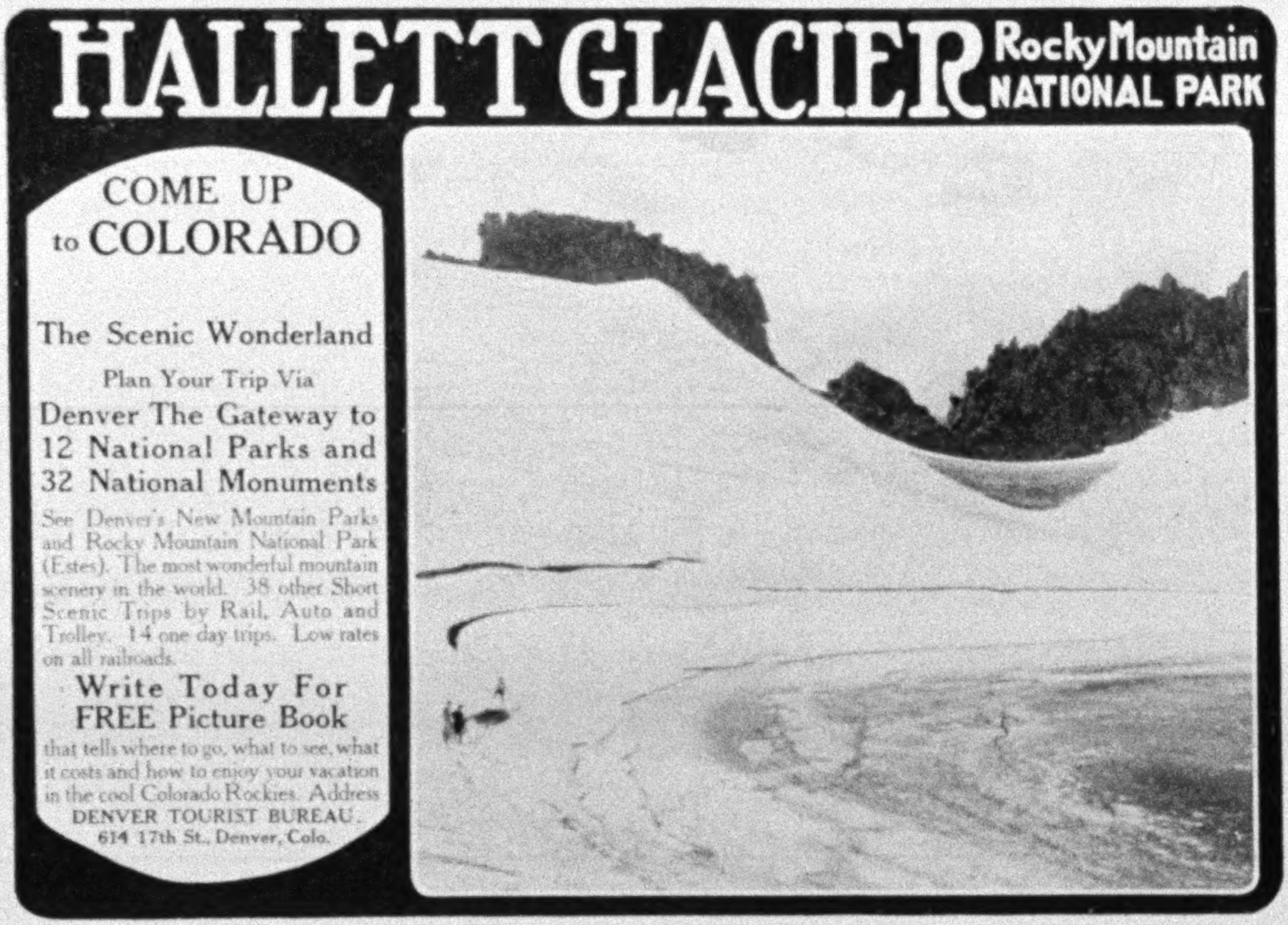

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(Write your address)

5-17

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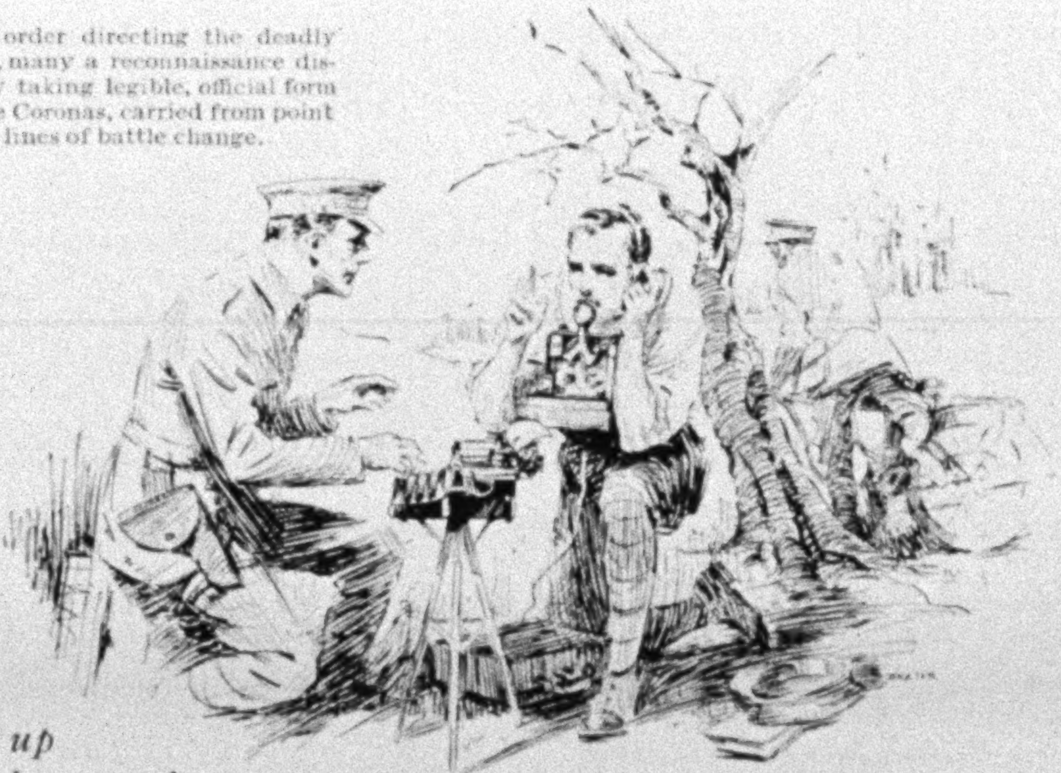

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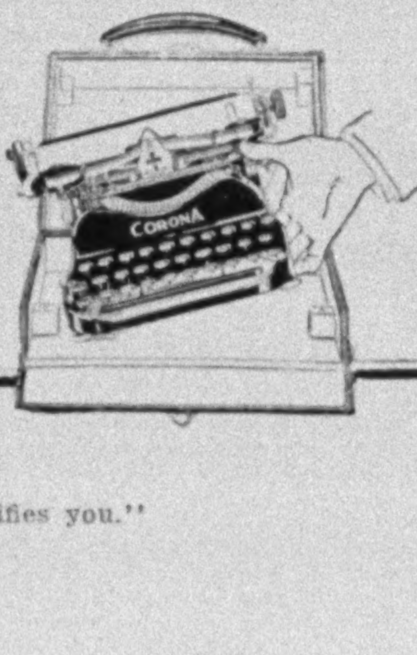
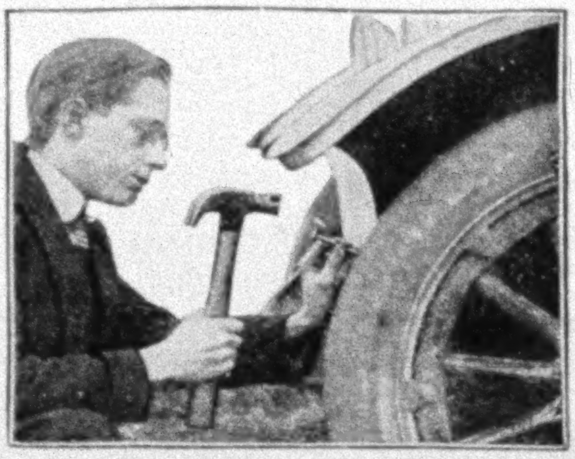


Puncture-Proof—
Will you accept *proof?*



Driving Nail into Tire Treated with Kor-Ker Puncture Cure. This is the strongest proof any one can ask and will convince the most skeptical.

**Kor-Ker
Puncture Cure**

America's Standard Tire Treatment

**Seals punctures
Stops slow leaks
Preserves rubber**

Kor-Ker seals any puncture up to the size of a ten-penny nail—seals it *immediately* and *permanently.* Kor-Ker ferrets out and *stops slow leaks.* Kor-Ker *preserves* rubber. Kor-Ker *reduces blowouts* to a minimum. Kor-Ker keeps tires at their *normal inflation,* preventing thereby 90% of tire troubles from fabric rupture, rim cutting, etc.

Detailed information and proof are shown in our Consumer and Dealer Booklets. Which do you want?

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73 Bridge St., Newark, N. J.

(We need high-class men to manage our branch offices—men who can earn $40 to $150 a week and build up their own business. Can you qualify? If so, write us.)

$5 Waiting For Their

$5 for this
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Wren
House
Built of Oak,
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Dodson House

Wrens raise two broods of young every year, sometimes three; therefore they need a house with 4 compartments.

Offer this special 4-room bungalow to some cute little pair of wrens and they will come back to you each season.

"Bird Friend" Book Free

A new book by Mr. Dodson, telling you how to attract song birds. Illustrates Dodson line, gives prices. Free with colored bird picture for framing.

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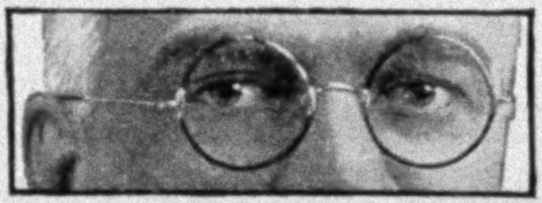
EYEGLASSES - SPECTACLES

They stick tight, *comfortably,* hold the lenses in the correct optical position and are the most becoming because least conspicuous.



SHELLTEX RIMS (Reg. U.S. Pat. Off.)

—the latest in Shur-ons. Stylish and elegant, made to meet the mode. Like all Shur-ons, quality guaranteed. At most high-grade optometrists, opticians, and oculists, or write us. Look for the name Shur-on or Shelltex in the bridge.

E. KIRSTEIN SONS CO.
249 Andrew Street Rochester, N. Y.

←Trade Mark *Established 1864*

DENBY
TRUCKS
FOR TRAIL OR PAVEMENT

DENBY performance records are remarkable because Denby Engineering and Manufacturing Standards are the highest it is possible to attain.

Denby Motor Truck Company
Detroit, Michigan

It is Important

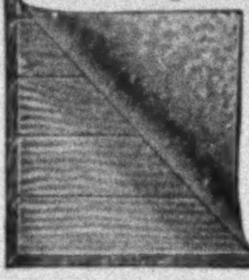
to emphasize the fact that there is only *one* genuine Compo-Board—that it is not a common name for wall board, but a trade-marked name for a patented product that is different from other wall boards. Because

CompoBoard
PATENTED
TRADE MARK

is made with a center core of kiln-dried wood slats, and that makes all the difference in the world.

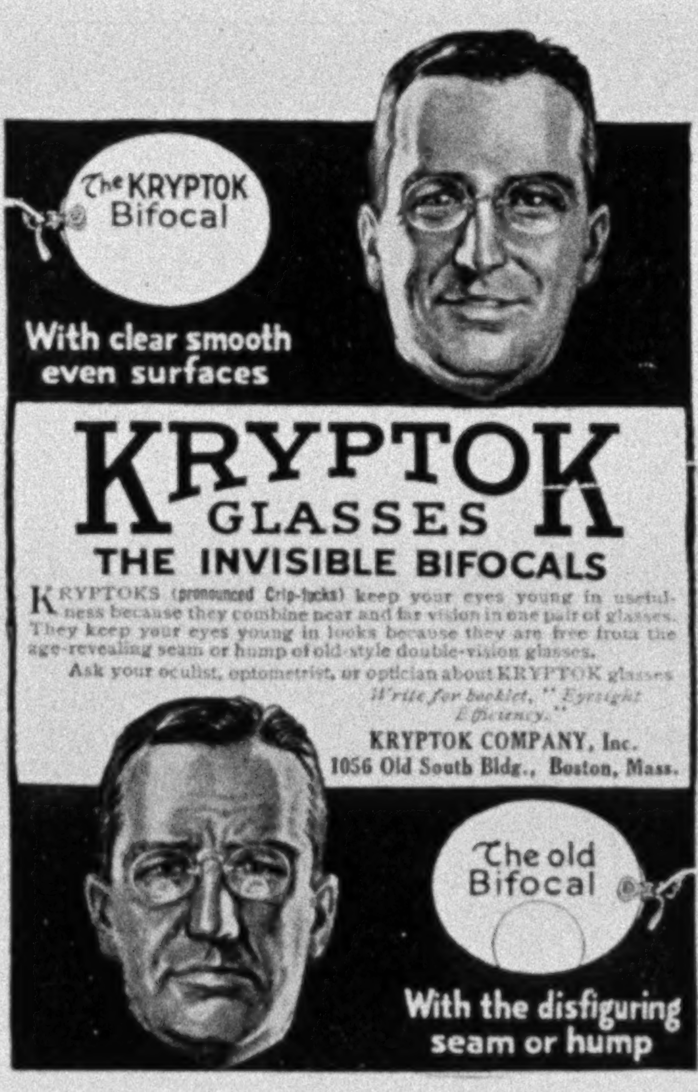
It makes for great strength, durability, cold, heat, and moisture-resisting quality and adaptability to a wide variety of decorative methods.

Compo-Board is *not* simply a *substitute* for lath and plaster. It is *something better*—it's the *modern* wall-lining.



Write for sample and interesting booklet.

THE COMPO-BOARD CO.
4512 Lyndale Ave. N.,
MINNEAPOLIS, MINN.


The KRYPTOK Bifocal
With clear smooth even surfaces
The old Bifocal
With the disfiguring seam or hump

KRYPTOK GLASSES

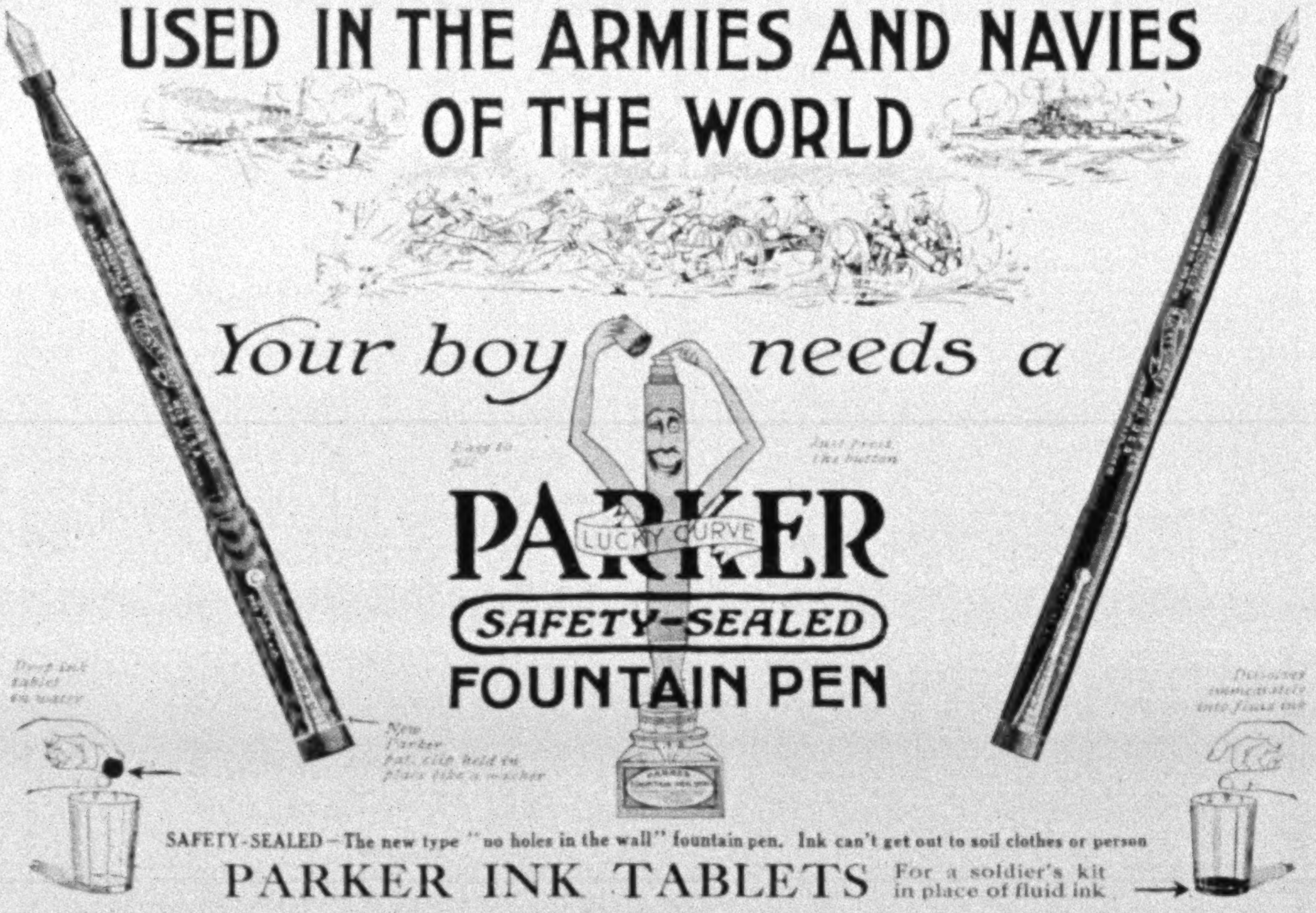
THE INVISIBLE BIFOCALS

KRYPTOKS (pronounced Crip-tocks) keep your eyes young in usefulness because they combine near and far vision in one pair of glasses. They keep your eyes young in looks because they are free from the age-revealing seam or hump of old-style double-vision glasses.

Ask your oculist, optometrist, or optician about KRYPTOK glasses

Write for booklet, "Eyesight Efficiency."

KRYPTOK COMPANY, Inc.
1056 Old South Bldg., Boston, Mass.


Easy to fill
Just press the button
Drop ink tablet in water
New Parker pat. clip held in place like a washer
Dissolves immediately into fluid ink
LUCKY CURVE

USED IN THE ARMIES AND NAVIES OF THE WORLD

Your boy needs a

PARKER

SAFETY-SEALED

FOUNTAIN PEN

SAFETY-SEALED—The new type "no holes in the wall" fountain pen. Ink can't get out to soil clothes or person

PARKER INK TABLETS For a soldier's kit in place of fluid ink →

PARKER PEN COMPANY, 18 Mill Street, Janesville, Wisconsin; New York Retail Store, Woolworth Building

DON'T BE ASHAMED
of your garbage can

Your garbage can should be just as unnoticed and just as sanitary as the rain spouts on your house. Witt's meets these requirements. It won't rust and won't dent. Made of heavy galvanized, corrugated steel—29 times stronger than plain steel. It outlasts two ordinary cans. Witt's lid fits air-tight. Keeps odors in; keeps dogs, rats, flies out. Buy Witt's for your home. It saves you money. Write for booklet and name of nearest Witt dealer.

THE WITT
CORNICE CO.
Dept. B
Cincinnati, Ohio

Witt's
Witt's

WITT'S
CAN &
PAIL

Lantern Slides
from
Photographs in
National Geographic Magazine

SO MANY REQUESTS are being constantly received regarding lantern slides from the copyright photographs in the GEOGRAPHIC that arrangements have been completed to supply them to members of the Society. Slides are not kept in stock, each order being made up as received, and will be delivered within two weeks after receipt of order, unless otherwise advised.

The copyright notice must appear on each slide. The purchase of lantern slides does not carry with it the authority to publish the pictures and they cannot be used for advertising purposes.

Slides cannot be sent upon approval and a remittance must accompany each order. The slides will be carefully packed and sent by express collect. Prices in the United States (standard size), black and white, 75 cents each; colored, $1.50. Address,

Dept. L, National Geographic Magazine
WASHINGTON, D. C.

Modern factories, turning out maximum production, are usually equipped with Fenestra Solid Steel Windows. Manufacturers everywhere know these windows make possible more and better work, because—

Thoroughly lighted rooms inspire quality with quantity; correct ventilation and proper weather protection build healthy, energetic employes; strength and fire resistance help to increase security and assure continued manufacture.

Knowing architects recommend Fenestra Sidewall Sash for factories and for office buildings Vertically Sliding Sash. Made by Detroit Steel Products Company, 2519 East Grand Boulevard, Detroit, where most of America's solid steel windows are made.

Fenestra

SOLID STEEL WINDOWS

Dioxogen

H_2O_2 12v

"Sore Throat"

is a thing full of terror—

But sore throat can easily be guarded against by the exercise of a little intelligent care. Keep the mouth and throat clean and healthy by the use, morning and evening, of

Dioxogen

(*a teaspoonful to a quarter glass of water*)

and the germs which cause sore throat, colds, and La Grippe have no chance to develop.

Dioxogen keeps the throat clear and free from irritation and huskiness.

The Oakland Chemical Co.
10 Astor Place, N. Y.

Dioxogen
TRADE MARK
A POWERFUL
ANTISEPTIC AND DISINFECTANT FOR INTERNAL AND EXTERNAL USE
INODOROUS AND HARMLESS
THE OAKLAND CHEMICAL CO.
NEW YORK

Swift
Swift's Premium Bacon Swift & Company U.S.A.
Swift's Premium Bacon Sliced

Get your favorite bacon in the form you like best

To give you not only exceptionally delicious bacon, but bacon in just the form you prefer, "Swift's Premium" is packaged in three different ways.

You can get it in the always popular strip, or in slices put up snugly and either sealed in glass jars or protected in parchment-wrapped boxes.

And such appetizing slices! Slices with the rind carefully trimmed away, slices that are absolutely uniform, and cut neither too thick nor too thin!

Serve "Swift's Premium" Bacon often. Seven days a week your family would enjoy the flavor the famous Swift cure gives. You will appreciate the convenience of getting their favorite bacon in the form you prefer.

"Swift's Premium" Bacon

Swift & Company, U. S. A.

The Baldwin Piano

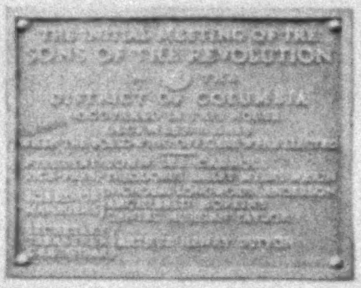
Grand Prix, Paris
Grand Prize, St. Louis

THE richness, evenness, depth and charm of Baldwin tone cannot be duplicated. Only with the Baldwin Piano can it be produced because only the Baldwin has the acoustic properties capable of its development. Those who approach the selection of a piano unprejudiced and with open mind find the Baldwin a revelation.

If you are interested in the purchase of a really high-grade piano, you should have the very attractive proposition now being offered to prospective buyers by The Baldwin Piano Company and its dealers. Write to nearest address.

The Baldwin Piano Company

Cincinnati.......142 W. Fourth St.
Chicago.........323 S. Wabash Av.
St. Louis..........1111 Olive St.
New York.........665 Fifth Av.
Denver..........1636 California St.
San Francisco.........310 Sutter St.
Indianapolis.......18 N. Penn'a St.
Louisville........521 S. Fourth Av.
Dallas..................1911 Elm Street



JNO. WILLIAMS, Inc.
Established 1875

Bronze Memorial Tablets

Designs and Estimates Furnished Free

Send for Illustrated Booklet

STATUARY BRONZE FOUNDRY
556 West 27th St. (Dept. T)
NEW YORK CITY

For a Dim Light All Night

Turn down your electric lights with the DIM-A-LITE and avoid the odor, dirt and danger of oil "night-lamps."

DIM-A-LITE Attachment, Fits any Socket and Lamp, $1.10
DIM-A-LITE Fixture Socket, (Permanent Type) 1.50
DIM-A-LITE Portable, with Cord and Plug 3.75

Ask any dealer, or by mail postpaid. Write for circulars and facts on saving of current.

Wirt Company, 5518 Lena St.
Philadelphia, Pa.

DIM-A-LITE
FIVE CHANGES OF LIGHT

You look at the clock for the *time* of day
Look at a *Tycos* for the *kind* of day

A BAROMETER is nearly as necessary as a clock. It gives you the weather, tells you of changes, forecasts sudden drops or rises, and prepares you for what is coming. An instrument which is scientifically correct is the S. & M. *Tycos*

No. 2252 HOUSE
***Tycos* Barometer**

The best materials enter into its construction. Adjustable by anyone to 3,500 feet altitude. In a 5-inch lacquered brass case with enamel metal dial.

S. & M. Weather Instruments are sold by your Optician and Scientific Instrument Dealers. If yours does not have an S. & M. *Tycos* House Barometer No. 2252 in stock send us his name and address and $10 and we will ship you one at once. Our 36-page Barometer Booklet, which describes other styles, is yours on request.

Taylor Instrument Companies Rochester, New York
World's Largest Manufacturers of Scientific Instruments

GRATON & KNIGHT

Standardized Series

LEATHER BELTING

Tanned by us for belting use

GRATON & KNIGHT

Are you trying to drive Pulleys with a Belting Specification?

How often does a belting specification get you the kind of belts you really should have? Do the belts you get agree with the specification? How many men in your plant could tell? Could *you?*

The only kind of specification the belt buyer should attempt to make is of the work to be done. Because to get the work done most efficiently and economically is the only possible reason for any kind of a specification about anything.

To get the work done properly, in every case, is the basis of the Graton & Knight Series of Standardized Leather Belts.

This Series was evolved to fit the working needs of actual conditions, *not* to meet theoretical conditions as described on paper. Every belt in this Series—and there is one for every transmission purpose—has been standardized only after it has been *proved* right.

This is the only proper way to *make* belts, and certainly belts made in this way are the only safe and sure ones to *buy*.

* * *

Face these facts squarely; then consider the safety, ease and economy of buying Graton & Knight Standardized Belts—not by guesswork, nor on discount, but on standardized performance.

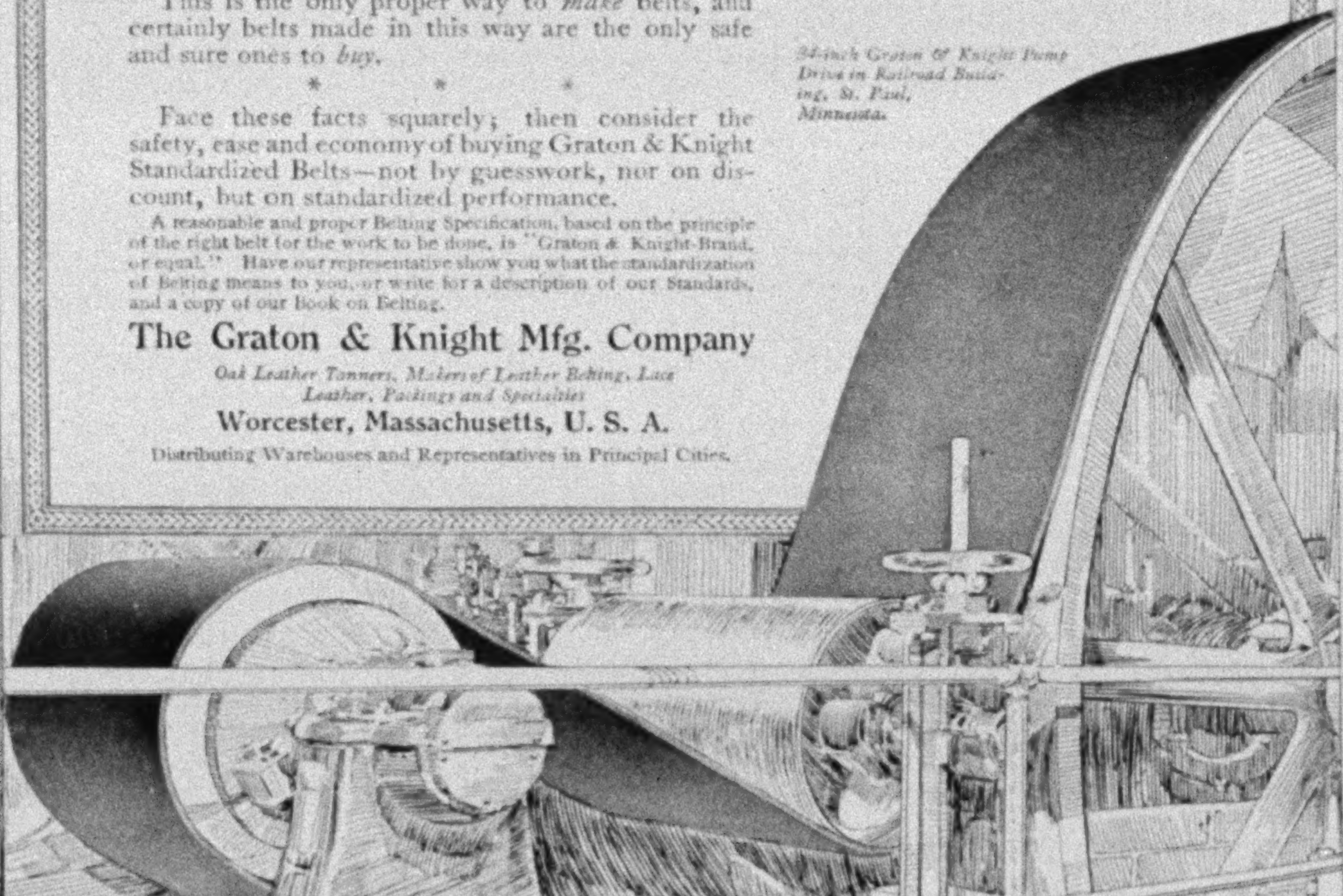
A reasonable and proper Belting Specification, based on the principle of the right belt for the work to be done, is "Graton & Knight-Brand, or equal." Have our representative show you what the standardization of Belting means to you, or write for a description of our Standards, and a copy of our Book on Belting.

The Graton & Knight Mfg. Company

Oak Leather Tanners, Makers of Leather Belting, Lace Leather, Packings and Specialties

Worcester, Massachusetts, U. S. A.

Distributing Warehouses and Representatives in Principal Cities.



34-inch Graton & Knight Pump Drive in Railroad Building, St. Paul, Minnesota.

STAND BEHIND THE MEN BEHIND THE GUNS

Buy a Liberty Loan Bond

AND

Help Win the War

Issued by the United States Government

Denominations—$50, $100, $500, $1,000, $5,000, $10,000, $50,000, and $100,000
First payment as low as One Dollar

INTEREST, 3½ PER CENT

You have until August 30, 1917, to pay in full for your bonds. *Ask* any *Banker*, *Postmaster*, *Express Company*, or *Merchant* for an Official Application Blank and—

Apply for Your Liberty Loan Bond Today
A Tribute to the Flag and the Safest Investment in the World

"Wars cannot be conducted without money. It is the first thing to be provided. In this war it is the most immediate help—the most effective help that we can give. We must not be content with a subscription of two billion dollars—we must oversubscribe this loan as an indication that America is stirred to the depths and aroused to the summit of her greatness in the cause of freedom. Let us not endanger success by complacent optimism. Let us not satisfy ourselves with the reflection that some one else will subscribe the required amount. Let every man and woman in the land make it his or her business to subscribe to the Liberty Loan immediately, and if they cannot subscribe themselves, let them induce somebody else to subscribe. Provide the Government with the funds indispensably needed for the conduct of the war, and give notice to the enemies of the United States that we have billions to sacrifice in the cause of Liberty.

"Buy a Liberty Bond today; do not put it off until tomorrow. Every dollar provided quickly and expended wisely will shorten the war and save human life."

W. G. McADOO,
May 14, 1917. *Secretary of the Treasury.*

A LIBERTY LOAN BOND IS UNCLE SAM'S PROMISE TO PAY, AND HE IS WORTH $225,000,000,000

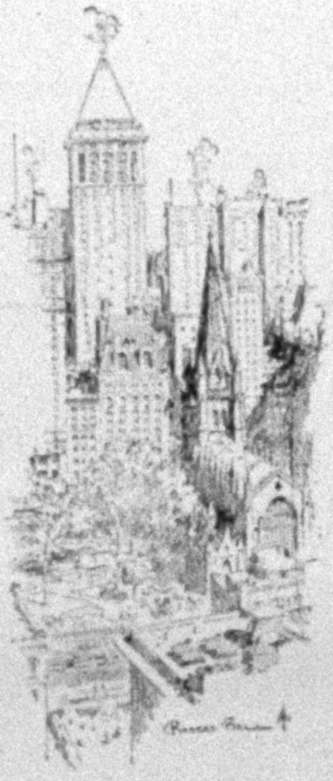
Let Us Help You Decide

IF you are undecided as to the appointing of an executor and trustee under will, call on or write to our officers and let them explain our facilities for handling estates.

The appointment of an executor and trustee is a very important matter and ought not be postponed. The safety and interests of your heirs require that you make a wise appointment, and prudence requires that you do it *now*.

Our booklet, "Let's Choose Executors and Talk of Wills," contains much valuable information for will makers.

BANKERS TRUST COMPANY
16 Wall Street New York
Resources over $350,000,000



Write for a free copy of
Vantine's Catalog

It is a fascinating book, filled with illustrations—many in actual colors—of the quaint and curious objects of art and utility collected by the Vantine representatives in Japan, China, Persia, and other Oriental countries.

As a reader of the *National Geographic Magazine* we feel sure you will be interested, for the Vantine Catalog "increases and diffuses geographic knowledge" by illustrating or describing the distinctive and individual creations of the artisans in the mystic lands beyond the seas.

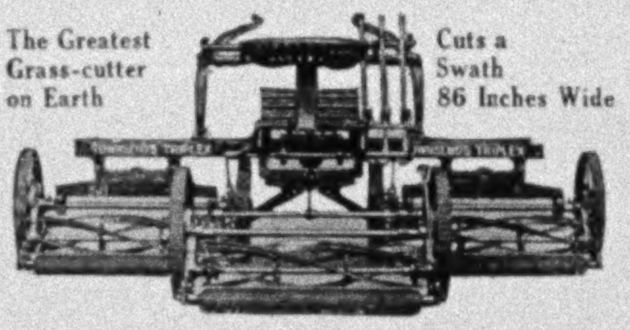
Write now—your name and address on a postal will do—and without obligation we shall send, postpaid, this delightful book of the Orient. Address Dept. N.

A. A. VANTINE & CO., Inc.
Fifth Ave. and 39th Street New York

TOWNSEND'S TRIPLEX

The Greatest Grass-cutter on Earth

Cuts a Swath 86 Inches Wide



Floats Over the Uneven Ground as a Ship Rides the Waves.

One mower may be climbing a knoll, the second skimming a level, while the third pares a hollow. Drawn by one horse and operated by one man, the TRIPLEX will mow more lawn in a day than the best motor mower ever made; cut it better and at a fraction of the cost.

Drawn by one horse and operated by one man, it will mow more lawn in a day than any three ordinary horse-drawn mowers with three horses and three men.

Does not smash the grass to earth and plaster it in the mud in springtime, neither does it crush the life out of the grass between hot rollers and hard, hot ground in summer, as does the motor mower.

The public is warned not to purchase mowers infringing the Townsend Patent, No. 1,209,519, December 19th, 1916.

Write for catalog illustrating all types of Lawn Mowers.

S. P. TOWNSEND & CO.
27 Central Avenue Orange, New Jersey

Purity Cross
Creamed Chicken
a la King

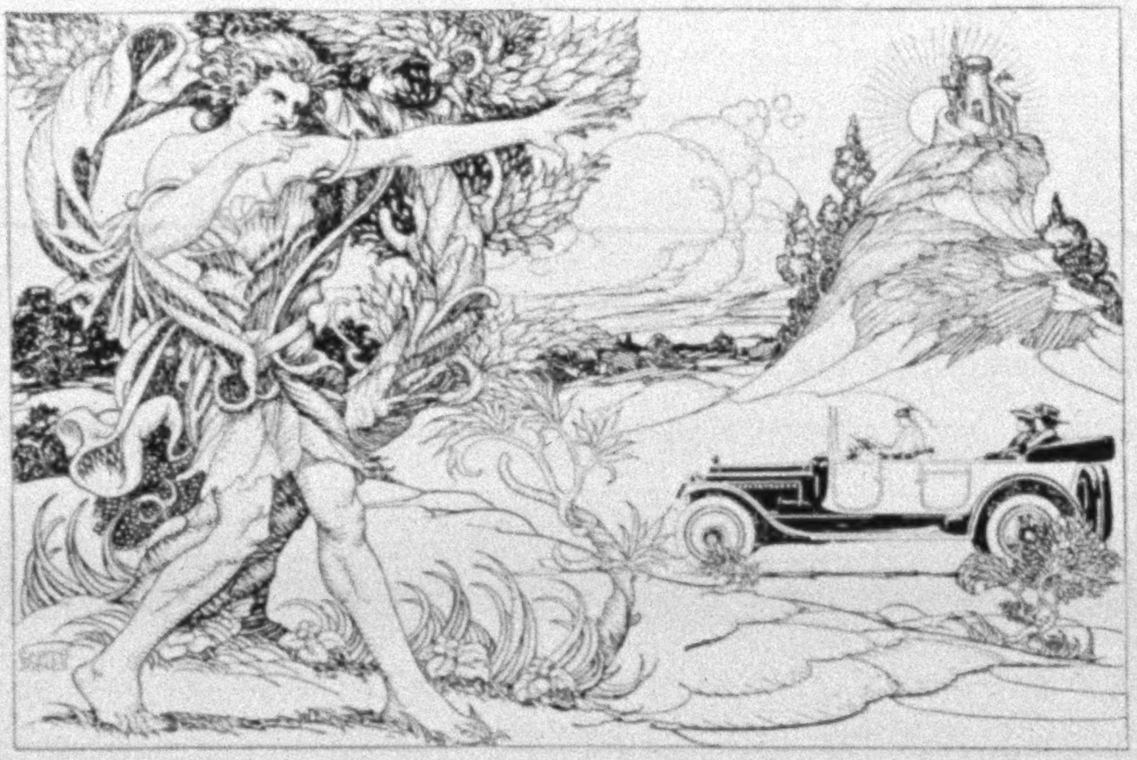
Prepared for you by our chef from the Paris Ritz—ready to heat and serve on toast, in patty shells, etc., in a moment.

Only 25c. and 50c. at all fine grocers

Or send us $1.45 or $2.85 for half dozen respective sizes, delivery prepaid if you name your best grocer. Write, mentioning him, for booklet. In Canada, 35c, 65c; $2.00 and $3.75 one-half dozen.

PURITY CROSS, Inc., Model Kitchen
Route 2 O. M., Orange, N. J.

The Purity Cross mark



Adventure! Just over the next hill-top—who knows what thrill awaits? Throughout all ages the spirit of adventure has ever enticed strong men into the open. But—now to travel to all the land's ends in the luxury, comfort and security of a powerful and economical Twin-six—that indeed is to add rare zest to the finest of adventures. ❦ There are twenty and more Packard body styles for you to select from. Prices, open cars, three thousand fifty, and thirty-five hundred dollars, at Detroit. ❦ ❦ Packard Motor Car Company.

Ask the man who owns one

Packard
TWIN-6

PRE NVMERO EXCELLENTIA

LOCOMOBILE

"SERIES TWO"

Announcement is made of the New Locomobile—Series Two—a continuation and higher development of the Six Cylinder Model.

Tandem ignition and other refinements—introduced in this series—produce largely increased power, quietness of operation and economy of fuel, without sacrificing simplicity.

This low-built indestructible Chassis, so safe, so efficient, is embellished with beautiful Coach Work of most exceptional comfort, taste and style.

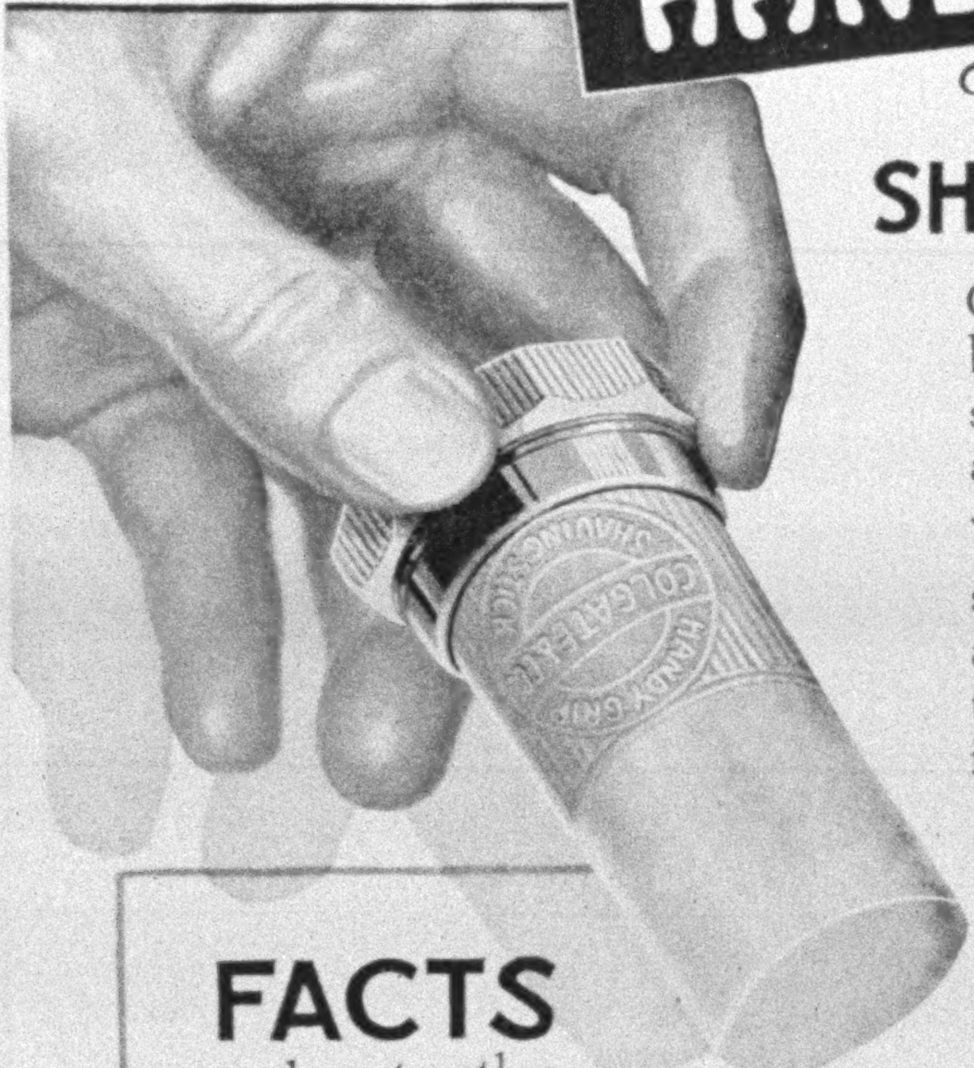
The Chassis with Locomobile Coach Work $5000. *to* $7400.
With Coach Work designed and built to order from about $6000. *to* $10,000

THE LOCOMOBILE COMPANY
OF AMERICA
Makers of Fine Motor Cars

PRESS OF JUDD & DETWEILER, INC.

COLGATE'S "HANDY GRIP"

The *NEW* SHAVING STICK

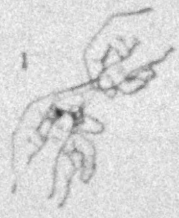


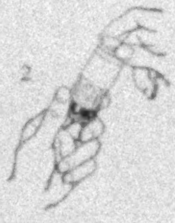
Colgate's "Handy Grip" combines economy, convenience, speed, and comfort better than any other shaving preparation.

We couldn't improve the soap, so in each detail of economy and convenience we improved the box to make it worthy of its contents.

Economy—No Waste

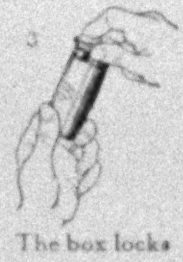
—for the last of the soap *unscrews* from the grip[1] and can be stuck to the top of the next stick.[2] This gives a fifth to a sixth more usable soap than in other containers. An economy—and a *new* feature.

1

Unscrew the stub

2

Stick it on the new stick

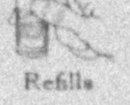
Greater Security

—no coming apart in your traveling case—one turn of the screw-thread locks the box. This, too, is *new*.[3]

3

The box locks

Less Cost

—for the "Handy Grip" box can be refilled[4] with "filler sticks" at a lower price. This also is *new*.

4

Refills

COLGATE & CO., New York

FACTS

-about other shaving soaps

—creams, for instance. Soap and Glycerine are the two essentials in shaving cream—the first to make a lather, the second to take up and hold water to keep the lather moist. Both Soap and Glycerine sink in water—and a shaving cream which floats is "fluffed up" with air.

Try the Sinking Test

Fill your wash-basin or a glass with water. Drop into it half an inch of Shaving Cream.

Does it sink or float?

Is it all shaving value or partly air?

Colgate's Shaving Cream will sink at once.

PROOF POSITIVE of its concentrated Glycerine and Soap content; proof also that with Colgate's you get the most luxurious and economical shave possible from a shaving cream.